

**Western Refining Southwest LLC**

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39

Jamestown, NM 87347

December 7, 2022

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

**RE: Response to Approval with Modifications
2021 Annual Groundwater Monitoring Report
Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery
EPA ID# NMD000333211
HWB-WRG-22-006**

Dear Mr. Shean,

Please find enclosed the response to comments from the New Mexico Environmental Department (NMED) Approval with Modifications letter dated August 23, 2022. A timeline of the 2021 Annual Groundwater Monitoring Report is provided below:

- Report, dated March 31, 2022
- Approval with Modifications, dated August 23, 2022

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

Certification

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

Sincerely,
Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery


Timothy J. Peterkoski
Director, Environmental Auditing & Processes

Enclosure

cc: D. Cobrain, NMED HWB
L. Andress, NMED HWB
L. Barr, MNOCD

J. Moore, Gallup Refinery
K. Luka, MPC
H. Jones, Trihydro Corporation

ATTACHMENT A
RESPONSE TO COMMENTS

New Mexico Environment Department (NMED) to Western Refining Southwest LLC (DBA Marathon Gallup Refinery [Refinery]) Comment Letter “Approval with Modifications 2021 Annual Groundwater Monitoring Report” (August 23, 2022)

NMED Comments	Refinery Responses
Comment 1:	Response 1:
In Section 4.1 (Potentiometric Surface), page 16 of 25, paragraph 2, the Permittee states, “[p]otentiometric surface maps were prepared using the third quarter (annual) monitoring event data.” Although the groundwater elevation data were collected quarterly in 2021, only the data collected during the third quarter was used to prepare the potentiometric surface maps. Explain why the third quarter data was used to generate the potentiometric surface maps. Furthermore, confirm and state that the data collected during the first, second and fourth quarters are consistent with that of the third quarter so that the maps prepared using the third quarter data are representative of the entire groundwater elevation data set collected in 2021 in the revised Report. Provide replacement pages accordingly or include additional potentiometric surface maps using the data collected from the other quarterly monitoring events.	This comment is acknowledged. To be consistent with historical annual groundwater reports, all groundwater elevation data are presented in Table 4-1 and Appendix B and only the third quarter event potentiometric surface was mapped. The third quarter event is used because it is the most comprehensive fluid level and sampling event. Because not all wells are measured every quarter, the potentiometric surface maps from other quarters may incorrectly illustrate groundwater flow. Therefore, only the third quarter potentiometric surface maps will be included with the annual groundwater monitoring reports. Third quarter data are consistent with data from other quarters and Section 4.1 (Potentiometric Surface) was revised to add, “The potentiometric surface is consistent throughout the year and the third quarter data is representative of the entire groundwater elevation data set for the year.”
Comment 2:	Response 2:
In Section 5.1 (Analytical Results), page 18 of 25, paragraph 5, the Permittee states, “[a]ll data provided by analyses where the limit of detection values exceed the cleanup levels are considered data quality exceptions and will not be used to demonstrate compliance. Furthermore, all data quality exceptions are identified in the tables where the data are presented and will continue in all future submittals.” Tables 5-1 (Volatile Organic Compounds Analytical Data) through 5-5 (General Chemistry and Total Petroleum Hydrocarbon Analytical Data) and 5-7 (PFAS Analytical Data) identify the data quality exceptions	This comment is acknowledged. Data quality exceptions where the LOD value exceeds the cleanup level are denoted by italicized text in the applicable tables. Adding another table displaying the same information would be redundant. To provide further clarification, Section 5.1 (Analytical Results), was updated to state, “Data provided by analyses where the limit of detection values exceeds the cleanup levels are considered data quality exceptions and will not be used to demonstrate compliance. These data quality exceptions are identified by italicized font and presented in Tables 5-1 through

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NMED Comments	Refinery Responses
where the limit of detection (LOD) values exceed the cleanup levels by italicizing them. However, such data quality exceptions must also be discussed in the text of the Report. In addition, the Permittee must present a separate summary table that lists all compounds where the LOD values exceed the cleanup levels, the LOD values, and the applicable cleanup levels. Provide the table as an addition to the Report and provide replacement pages, as necessary.	5-5 and 5-7. Furthermore, data quality exceptions are identified in the tables where the data are presented and will continue in all future submittals.” It should also be noted that analyte data quality exceptions are monitoring well and analyte specific. For example, an analyte could have a data quality exception for one monitoring well but might not have a data quality exception for another.
Comment 3:	Response 3:
In Section 5.2 (Discussion of New Findings), page 19 of 25, paragraph 4, the Permittee states, “PFAS samples were collected during all four quarters; however, the first quarter samples were not collected following approved PFAS sampling protocols.” NMED has not previously approved PFAS sampling protocols. Discuss the PFAS sampling protocols used during the 2021 sampling events in future groundwater monitoring work plan updates. No revision is required to the Report.	This comment is acknowledged. PFAS sampling techniques will be provided as part of the 2023 Groundwater Monitoring Work Plan (see Response to Comment 12).

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NMED Comments	Refinery Responses
Comment 4:	Response 4:
In Sections 5.2 (Discussion of New Findings), page 19 of 25, paragraph 6, and 7.0 (Conclusions), page 23 of 25, bullet 3, the Permittee states, “[a]s shown on Figure 4-2, the potentiometric surface is 6,900.38 ft above mean sea level (amsl) in well OW-54, 6,904.78 ft amsl in OW-55, and 6,905.80 ft amsl in OW-56. In this area of the Refinery, water is flowing from well OW-56 towards wells OW-54 and OW-55, which is consistent for the data collected in 2020 and 2021. Therefore, wells OW-54 and OW-55 are not influencing the dissolved phase constituent concentrations detected in OW-56.” Comment 11 of the NMED’s October 20, 2021 <i>Disapproval</i> required the Permittee to evaluate the effect of the groundwater recovery system because well OW-56 reported historically low concentrations of benzene (less than 2.5 µg/L). However, benzene concentrations at well OW-56 were detected at 547 µg/L during the fourth quarter of 2020. Furthermore, the potentiometric surface elevations (6,905.80 ft amsl) at well OW-56 were measured under natural conditions while the groundwater recovery system was shut off; therefore, the discussion is not relevant. Since wells OW-54 and OW-55 were located downgradient of well OW-56, the groundwater recovery system operated in wells OW-54 and OW-55 may have created a steeper hydraulic gradient in the vicinity of well OW-56 and accelerated the transport of the dissolved phase constituents that are present upgradient of well OW-56. The notable increase of the dissolved phase constituent concentrations in 2020 may have been caused by the operation of the groundwater recovery system. Regardless, the groundwater	This comment is acknowledged. Evaluation of the effect of the groundwater recovery system will not be included in this or future annual groundwater reports, unless the recovery systems are reactivated.

New Mexico Environment Department (NMED) to Western Refining Southwest LLC (DBA Marathon Gallup Refinery [Refinery]) Comment Letter “Approval with Modifications 2021 Annual Groundwater Monitoring Report” (August 23, 2022)

NMED Comments	Refinery Responses
recovery system is no longer active and was removed from the site according to the Permittee’s March 11, 2022 correspondence. The benzene concentration in the groundwater sample collected from well OW-56 has since decreased to 3.8 µg/L during the fourth quarter of 2021 according to Table 5-1; therefore, the Permittee is no longer required to evaluate the effect of the groundwater recovery system. No revisions required.	
Comment 5:	Response 5:
In Section 5.3.1 (Rejected Data), page 20 of 25, paragraph 2, the Permittee states, “[r]ejected data are presented in their respective tables and explanations of the qualifiers can be found in the data validation reports provided in the following Appendices: -Appendix D-1 - Reports 2103532, 2103142, and 2103470 -Appendix D-2 - Reports 2106877, 2106055, 2106814, 2106976, 2106895, and 2106646 -Appendix D-3 - Reports 2109709, 2109D30, and 2109C62 -Appendix D-4 - Reports 2112902, 2112658, 2112634, 2112997, and 2112870” The Permittee is required to identify the analytes where analytical results were rejected and discuss the cause of rejection within the text of the Report. Include the discussion in the revised Report and provide replacement pages.	This comment is acknowledged. As stated in Section IV.L.4.h of the 2017 RCRA Post-Closure Permit (Modified September 2017): “A table summarizing the laboratory analytical data, QA/QC data, applicable cleanup levels, and modifications to the sampling program can be substituted for this section.” The data validation reports included as Appendix D of the Report provide the data qualifiers and the reasons for the qualifications, which is summarized in the Data Qualification Summary (i.e., QA/QC data) tables provided at the end of each data validation report. No revisions to the Report were made.

New Mexico Environment Department (NMED) to Western Refining Southwest LLC (DBA Marathon Gallup Refinery [Refinery]) Comment Letter “Approval with Modifications 2021 Annual Groundwater Monitoring Report” (August 23, 2022)

NMED Comments	Refinery Responses
Comment 6: In Section 6.0 (Remediation Activities), page 22 of 25, paragraph 1, the Permittee states, “[f]luid recovery at the Refinery is reported quarterly in the Hydrocarbon Interim Measures Seep Reports.” Since the groundwater recovery systems for the OW wells are no longer Operational and have been removed, it is NMED’s understanding that the discussions regarding fluid recovery at the Refinery are the recovery events conducted at the MKTF and RW wells using vacuum trucks. Clarify the statement in the revised Report and provide replacement pages.	Response 6: This comment is acknowledged. The discussion regarding fluid recovery events via vacuum truck is referencing MKTF, OW, and RW wells listed in Table 6-3, in addition to recovery in the standpipe and retention ditch and borrow pit sumps. This information is also provided quarterly in the Hydrocarbon Interim Measures Seep Reports. No revisions were made to the Report.
Comment 7: In Section 7.0 (Conclusions), page 23 of 25, bullet 2, the Permittee states, “[t]he presence and distribution of SPH is generally consistent with historical monitoring data except for wells MKTF-13, MKTF-17, MKTF-48, GWM-1, OW-61, and OW-65, where SPH thickness increased slightly.” According to Table 4-1 (Fluid Level Monitoring), the statement is not accurate. For example, separate phase hydrocarbon (SPH) thickness for MKTF-17 in February 2020 and June 2021 is recorded as 5.41 feet and 0.05 feet, respectively. The SPH thickness clearly decreased in MKTF-17 in 2021. Correct the statement for accuracy and provide replacement pages.	Response 7: This comment is acknowledged. The SPH thickness in MKTF-17 increased between January 2021 and June 2021 from 0.02 ft to 0.05 ft, but when compared to historical values, the SPH thickness has decreased. In Section 7.0 (Conclusions), page 23 of 25, bullet 2, has been corrected to state, “The presence and distribution of SPH in 2021 is generally consistent with, or slightly lower than historical monitoring data except for wells MKTF-39, MKTF-48, MKTF-50, GWM-1, OW-61, OW-65, RW-1, and RW-6 where SPH thickness increased slightly when compared to historical values.” These changes were also reflected in Section 4.2 (SPH Detections), paragraph 2.

New Mexico Environment Department (NMED) to Western Refining Southwest LLC (DBA Marathon Gallup Refinery [Refinery]) Comment Letter “Approval with Modifications 2021 Annual Groundwater Monitoring Report” (August 23, 2022)

NMED Comments	Refinery Responses
Comment 8:	Response 8:
Table 3-1 (Groundwater Monitoring Program 2021) indicates that well OW-12 was annually sampled. Comment 16 of the NMED’S October 20, 2021 <i>Disapproval 2020 Annual Groundwater Monitoring Report</i> states, “[w]ell OW-12 must be monitored and sampled on a semi-annual basis in 2022.” Since the Report pertains to the 2021 groundwater monitoring activities, no revision is required to the Report. The sampling frequency for well OW-12 must be recorded as a semi-annual in the 2022 groundwater monitoring work plan and report. This comment serves as a reminder, no revision is required to the Report.	This comment is acknowledged. Well OW-12 will be sampled semiannually for the calendar year 2022. This revision to the 2022 groundwater monitoring work plan was submitted to NMED via email on February 21, 2022.
Comment 9:	Response 9:
Several issues were identified in Table 3-2 (Cleanup Levels) regarding its accuracy. Resolve the issues below in the 2022 groundwater monitoring report. a) Table 3-2 lists cleanup levels for selected analytes, references for the screening levels, and applicable site cleanup levels. However, it is not clear which analytical method(s) (e.g., EPA Method 8260) were used. Modify the table to include the information regarding the analytical methods. b) Table 3-2, page 4 of 4 lists cleanup levels for gasoline range organics (GRO) and total petroleum hydrocarbons (TPH) (C6-C10) as 10.1 µg/L and Not Applicable (NA), respectively. However, GRO and TPH (C6-C10) represent the same result and	These comments are acknowledged. See responses to each below: a) The cleanup level is constant for each analyte regardless of analytical method is used. Because the cleanup levels are not dependent on the analytical method used, they are not necessary to display on Table 3-2 (Cleanup Levels). The analytical methods used can be viewed in Appendix C (Lab Reports) and are also outlined in the 2021 groundwater work plan. No revisions to the Report were made. b) GRO and TPH (C6-C10) as well as Motor oil, ORO, and TPH (C28-40) are all included on Table 3-2 and Table 5-5 (General Chemistry and Total Petroleum Hydrocarbon

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it is unnecessary to list two separate cleanup levels. Similarly, Table 3-2, page 4 of 4 lists cleanup levels for motor oil, oil range organics (ORO) and TPH (C28-C40) as 85.8 µg/L, 85.8 µg/L and NA, respectively. However, motor oil, ORO and TPH (C28-C40) represent the same result and it is unnecessary to list three separate cleanup levels. c) Table 3-2, page 4 of 4 lists cleanup levels for total dissolved solids (TDS), Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Coliform, E-Coli, E-Coli and pH as NA for all. New Mexico Administrative Code (NMAC) Sections 20.62.2101 and 3103 list the standards for BOD, COD, and fecal coliform bacteria, as 30 mg/L, 125 mg/L, and 500 organisms per 100 ml, respectively. Evaluate whether these standards are applicable to the site monitoring program. Include the standards, as appropriate. d) Table 3-2 does not provide information regarding the screening levels for PFAS. Include the screening level of PFAS in the revised Table 3-2. See the June 2022 NMED <i>Risk Assessment Guidance for Site Investigation and Remediation</i> for the most recent cleanup levels.	Analytical Data) because they represent different historical analytical methods even though they can be viewed as repetitive. They were all included separately for clarity when referencing the tables. However, this also means that TPH (C28-C40) and TPH (C6-C10) have incorrect screening levels as “NA”. The screening levels for these compounds have been corrected on both Table 3-2 and Table 5-5. These tables are included in the revised Report. c) Table 3-2 has been updated to display standards for BOD, COD, TDS, Coliform E-Coli, E-Coli, and pH of 30,000 ug/L, 125,000 ug/L, 500 ug/L, 500 most probable number of organisms (MPN) per 100 mL, 500 MPN per 100 mL, and between 6.6 and 8.6 standard units respectively. Table 5-5 has also been updated to reflect the addition of these standards. These tables are included in the revised Report. d) The June 2022 NMED <i>Risk Assessment Guidance for Site Investigation and Remediation</i> were not included on Table 3-2 because this Report was submitted in March 2022, and they were not yet available. The most up to date standards at the time the report is prepared will be used for all annual groundwater monitoring reports. However, the total PFAS on Table 5-7 (PFAS Analytical Data), was calculated incorrectly. The health advisory level is for the total of three PFAS compounds, not all PFAS. The correction is included on updated Table 5-7. The total PFAS health advisory level has also been added to Table 3-2.

New Mexico Environment Department (NMED) to Western Refining Southwest LLC (DBA Marathon Gallup Refinery [Refinery]) Comment Letter “Approval with Modifications 2021 Annual Groundwater Monitoring Report” (August 23, 2022)

NMED Comments	Refinery Responses
Comment 10:	Response 10:
There are some issues identified in Table 5-2 (Semi-volatile Compounds Analytical Data). Resolve the issues below in the 2022 groundwater monitoring report. a) According to Table 5-2, it is not clear whether 1,4-dioxane was analyzed by EPA Method 8270 SIM, as directed by NMED’s October 20, 2021 <i>Disapproval</i>. Indicate the analytical method used to analyze 1,4-dioxane in the revised table. b) Table 5-2 must only present analytical data for semi-volatile compounds (SVOCs) as titled for the table; however, it also contains analytical data associated with pesticides analysis (e.g., 4,4'-DDD). The results of pesticides analysis must be presented in a separate table for clarity. Provide a separate table that reports analytical data associated with pesticides in all future annual groundwater monitoring reports.	These comments are acknowledged. See responses to each below: a) For the 2021 reporting period, 1,4-dioxane was analyzed using EPA Method 8270SIM. For future reference, the methods used for all analyte analyses can be viewed on the lab reports which are included in as Appendix C. b) The pesticides have been removed from Table 5-2, which has been renamed to Table 5a, and are presented on a new table: Table 5-2b (Pesticides Analytical Data). Both tables are included in the revised Report. Also, the text in Section 5.1 (Analytical Results) has been revised to state, “VOCs are presented in Table 5-1, and SVOCs are presented in Table 5-2a, and pesticides are presented in Table 5-2b.”
Comment 11:	Response 11:
According to Table 5-5 (General Chemistry and Total Petroleum Hydrocarbon Analytical Data), sulfide analysis was not listed. Comment 18a of the NMED’S October 20, 2021 <i>Disapproval</i> states, “[i]nclude the sulfide analytical data collected from pertinent wells in the 2021 Report.” Include the analytical data for sulfide in the revised Report and provide replacement pages.	Western’s response to Comment 18a of NMED’s October 20, 2021 <i>Disapproval 2020 Annual Groundwater Monitoring Report</i> states, “sulfide analysis was not conducted in 2021 because MPC’s response to Comment 3a of the NMED’s February 2021 letter was discussed in the “Response to Disapproval, Natural Attenuation Assessment and Proposed Work Plan for the Hydrocarbon Seep Area”, submitted to NMED on August 27, 2021. Sulfide analysis was included in

New Mexico Environment Department (NMED) to Western Refining Southwest LLC (DBA Marathon Gallup Refinery [Refinery]) Comment Letter “Approval with Modifications 2021 Annual Groundwater Monitoring Report” (August 23, 2022)

NMED Comments	Refinery Responses
	the 2022 Facility Wide Groundwater Monitoring Work Plan submitted to NMED February 4, 2022.” Therefore, sulfide analysis is not applicable to the 2021 annual groundwater monitoring report, but it will be included in the 2022 annual groundwater monitoring report.
Comment 12:	Response 12:
According to Table 5-7 (PFAS Analytical Data), page 1 of 1, the total per- and polyfluoroalkyl substances (PFAS) concentrations in the groundwater samples collected from well OW-63 were recorded as more than 3,000 ng/L during the 2021 sampling events which exceed the screening level. Based on this information, a PFAS plume may be present in the vicinity of OW-63. Submit a work plan to investigate the extent of the PFAS contamination no later than December 31, 2022.	This comment is acknowledged. A work plan will be prepared to investigate the extent of PFAS contamination around OW-63. The work plan will be submitted to NMED by December 31, 2022. In addition, the total PFAS on Table 5-7 (PFAS Analytical Data), was calculated incorrectly. The health advisory level is for the total of three PFAS compounds, not all PFAS. The correction is included on updated Table 5-7.

ATTACHMENT B
REDLINE/STRIKEOUT
REVISED 2021 ANNUAL GROUNDWATER MONITORING REPORT
(ELECTRONIC COPY)



Western Refining Southwest LLC
D/B/A Marathon Gallup Refinery
2021 Annual Groundwater Monitoring Report



**WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
2021 ANNUAL GROUNDWATER MONITORING
REPORT**

MARCH 31, 2022
REVISED DECEMBER 7, 2022



Western Refining Southwest LLC
D/B/A Marathon Gallup Refinery
2021 Annual Groundwater Monitoring Report

Executive Summary

Facility-wide groundwater monitoring activities were completed at the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery), during 2021. Activities included fluid level gauging, analytical sampling, and separate phase hydrocarbon recovery (SPH). Groundwater monitoring at the Refinery was conducted in accordance with the Resource Conservation and Recovery Act Post-Closure Permit (NMED 2017) and the 2020 Annual Facility-Wide Groundwater Monitoring Work Plan (2020 Work Plan) (Western LLC 2021b). The Work Plan was approved with modification by New Mexico Environment Department (NMED) on February 16, 2021.

The groundwater monitoring network at the Refinery consisted of 131 locations, which includes monitoring wells, water-production wells, surface sample locations, and leak detection units. These locations were sampled quarterly, semiannually, and annually as specified in the 2020 Work Plan. Fluid levels were measured monthly, quarterly, semiannually, and annually. Depth to water and SPH measurements were collected during 2021. These results were consistent with historical monitoring.

The groundwater monitoring analytical results were compared to the New Mexico Administrative Code Water Quality Commission 20.6.2.3103 Levels, Environmental Protection Agency (EPA) Maximum Contaminant Levels, NMED Tap Water Screening Levels, and EPA Tap Water Screening Levels. Analytical results were consistent with historical results.

Recovery activities were conducted in 2021 and were summarized in the Hydrocarbon Interim Measures Seep Reports submitted quarterly to NMED. SPH recovery efforts appear to be having a positive impact on SPH thicknesses across the site.

Gauging and sampling requirements will continue in 2022 and will meet the most current NMED-approved Facility-Wide Groundwater Monitoring Work Plan. The 2022 Annual Groundwater Monitoring Report will be submitted no later than March 31, 2023. Recovery activities will continue to take place and will be summarized in the Hydrocarbon Interim Measures Seep Reports, submitted quarterly to NMED. Site assessments will take place as required and NMED will be notified of remediation activities.



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List of Acronyms

1,2-Dibromoethane	EDB
2020 Work Plan	2020 Groundwater Monitoring Work Plan
2021 Analyte List	2021 Groundwater Monitoring Work Plan Analyte List
amsl	above mean sea level
EP	Evaporation Pond
EPA	Environmental Protection Agency
ft	foot/feet
ft/d	feet per day
I-40	Interstate 40
MCL	Maximum Contaminant Levels
MKTF	Marketing Tank Farm
NM	New Mexico
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
PFAS	Per- and Polyfluoroalkyl Substances
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
Refinery	Western Refining Southwest LLC (DBA Marathon Gallup Refinery)
Report	2021 Annual Groundwater Monitoring Report
RPD	relative percent difference
SPH	separate phase hydrocarbon
SVOC	semi-volatile organic compound
VOC	volatile organic compound
WQCC	Water Quality Control Commission



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1.0 Introduction

This 2021 Annual Groundwater Monitoring Report (Report) documents the groundwater gauging and sampling events for 2021, as it pertains to the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery). This Report is submitted pursuant to the Refinery's Resource Conservation and Recovery Act (RCRA) Post-Closure Permit (NM000333211) (NMED 2017) and contains the information the Refinery is required to report annually.

The Refinery is located at Exit 39 on Interstate 40 (I-40), approximately 17 miles east of Gallup, New Mexico (NM), in Jamestown, NM (Figure 1-1). Gauging and sampling activities were conducted in accordance with the 2020 Groundwater Monitoring Work Plan (2020 Work Plan) (Western LLC 2021b), which was approved with Modification by New Mexico Environment Department (NMED) on February 16, 2021. Although the 2021 Groundwater Monitoring Work Plan was not approved until February 28, 2022 (NMED 2022), the Refinery used the 2021 Groundwater Monitoring Work Plan Analyte List (2021 Analyte List) (Western LLC 2022a).

1.1 Refinery Information

Built in the 1950s, the Refinery is located within a rural and sparsely populated area east of Gallup, NM. The nearest population centers are the Pilot Flying J Travel Center refueling plaza, the I-40 corridor, and a small cluster of residential homes located on the south side of I-40 approximately 2 miles southwest of the Refinery (Jamestown).

The Refinery has been indefinitely idled since October 9, 2020. During operation, the Refinery was a crude oil refining and petroleum products manufacturing facility. There were no organic chemicals, plastics, or synthetic fibers manufactured that contributed to the process flow of wastewater. As a result of the processing steps, the Refinery produced a wide range of petroleum products including propane, butane, unleaded gasoline, diesel, residual fuel, and commercial products of fertilizer and solid elemental sulfur. The Refinery did not manufacture lubricating oils.

Historically, the Refinery primarily received crude oil via two 6-inch diameter pipelines, which entered the Refinery property from the north (Four Corners Area). In addition, the Refinery also received natural gasoline feedstock via a 4-inch diameter pipeline that came in from the west along the I-40 corridor from the Western Refining Southwest LLC – Wingate Plant, which is also indefinitely idled. Crude oil and other products also arrived at the Refinery via railroad cars. These feed stocks were then stored in tanks until refined into products.



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1.2 Report Presentation

This Report presents the 2021 monitoring program as follows:

- Site Conditions – Site topography, surface water, and hydrogeology conditions are presented in Section 2.0.
- Monitoring Program – The groundwater and surface water program network are provided. In addition, regulatory criteria selection and 2020 Work Plan deviations are described. This information is presented in Section 3.0.
- Fluid Level Gauging – Fluid levels are measured at the Refinery on a monthly, quarterly, semiannual, and annual basis. Results for groundwater fluid levels were generally similar to those measured in prior years. These data are detailed in Section 4.0.
- Analytical Groundwater Data – Groundwater samples are collected quarterly and annually. Results for groundwater samples are compared to the appropriate New Mexico Environment Department (NMED) and the Environmental Protection Agency (EPA) cleanup levels. The analytical results are discussed in Section 5.0.
- Analytical Evaporation Pond Data – Evaporation Pond (EP) samples are collected semiannually as surface water samples. Results for the surface water samples are compared to the appropriate NMED and EPA cleanup levels. The analytical results are discussed in Section 5.0.
- Analytical Outfall Data – STP-1 to EP-2 is monitored quarterly. STP-1 to EP-2 was sampled during 2021. Results for the outfall samples are compared to the appropriate NMED and EPA cleanup levels. The analytical results are discussed in Section 5.0.
- Remediation Activities – Ongoing recovery activities take place at the Refinery. Activities completed in 2021 are described in Section 6.0.



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2.0 Site Conditions

The Refinery is located within a rural and sparsely populated section of McKinley County, NM. It is situated in the high desert plain on the western flank of the Continental Divide approximately 17 miles east of Gallup, NM (Figure 1-1). The surrounding land is comprised primarily of public and private lands used for cattle and sheep grazing.

2.1 Site Topography

Local topography consists of a gradually inclined down-slope from high ground in the southeast to a lowland fluvial plain in the northwest. The highest point on Refinery property is located at the southeast corner boundary (elevation approximately 7,040 feet [ft]) and the lowest point is located at the northwest corner boundary (elevation approximately 6,860 ft). Surface soils within most of the area of investigation are primarily Rehobeth silty clay loam. The Refinery is located on a flat man-made terrace.

2.2 Surface Water

Surface water in the Refinery consists of the man-made EPs and aeration basins (Figure 2-1). There are several storm water conveyance ditches located throughout the Refinery. These ditches are discharged into contained basins where storm water is collected and allowed to evaporate or discharged through two National Pollutant Discharge Elimination System (NPDES) outfalls (NPDES Permit #NMR053168).

The hydrocarbon seep area is routinely monitored to evaluate the discharge of hydrocarbons to the land surface where shallow water discharges have been observed within the retention ditch and to the south near the original seep location. The borrow pit seep area is routinely inspected for indications of separate phase hydrocarbon (SPH) and it found consistently found to be dry in 2021. The hydrocarbon seep area and borrow pit seep area are shown on Figure 2-1 and more information can be found in the quarterly Hydrocarbon Interim Measures Seep Reports.

2.3 Geology

Site boring logs indicate that subsurface fluvial and alluvial soils are primarily comprised of clays and silts with discontinuous inter-bedded sand layers. Very low permeability bedrock (e.g., claystones and siltstones) underlie the surface soils. The Chinle Group, from the Upper Triassic period, crops out over a large area south of the Refinery. The uppermost subunit within the Chinle Group is the Petrified Forest Formation, which is also sometimes referred to as the Petrified Forest Member. Inter-bedded within the Chinle Group is the Sonsela Sandstone bed, which lies within and parallels the dip of the Chinle Group. Its high point is located southeast of the Refinery and slopes downward to the northwest as it passes under the Refinery. Due to the hydraulic confinement of the Petrified Forest Formation aquitard, the Sonsela Sandstone bed acts as a water-bearing reservoir and is artesian at its lower extremis. Artesian conditions exist through much of the central and western portions of the Refinery.



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2.4 Hydrogeology

Groundwater flow within the shallow alluvium and the upper Chinle Formation is highly variable due to the presence of complex and irregular stratigraphy including sand stringers, cobble beds, and dense clay layers. Hydraulic conductivity ranges from 30 ft per day (ft/d) for gravelly sands immediately overlying the Petrified Forest Formation to 3×10^{-5} ft/d in the clay soils located near the surface. Groundwater flow within the Lower Chinle Formation is extremely slow and typically averages less than 2.83×10^{-7} ft/d (i.e., less than 0.01 ft per year).

Water level data are collected routinely at the Refinery. Wells at the Refinery have been categorized based on the hydrogeologic unit in which they are screened, including the alluvial/fluvial upper sand aquifer, the Chinle/alluvium aquifer, and the Sonsela Sandstone aquifer. The alluvial/fluvial upper sand aquifer has a limited areal extent, existing only on the western margin on the Refinery. Groundwater occurrence in this aquifer is sporadic and limited.

The majority of the wells monitored lie within the shallow weathered sediments that comprise the Chinle/alluvium aquifer. Within the Chinle/alluvium aquifer, shallow groundwater located under the Refinery property generally flows along the upper contact of the Chinle Formation. The prevailing flow is from the southeast to the northwest, although localized areas may have varying flow directions based on the subsurface geology.

Groundwater within the Sonsela flows southeast to northwest. Hydraulic heads measured within the Sonsela are generally lower than those observed within the shallow aquifer near the topographic high on which the Refinery process area and tank farm are situated, and higher than those observed within the shallow aquifer in topographically low areas to the west and northwest, near the EPs. The higher head in the Sonsela in low areas is due to confining pressure from lower permeability Chinle Formation bedrock between the shallow Chinle/alluvium aquifer and the Sonsela Sandstone bed at depth, which makes the Sonsela Sandstone aquifer locally artesian.



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3.0 Monitoring Program

The monitoring program at the Refinery is conducted pursuant to the RCRA Post-Closure Permit (NMED 2017), the 2020 Work Plan (Western LLC 2021b), and the 2021 Analyte List (Western LLC 2022a). The monitoring program was completed to provide a comprehensive understanding of the dissolved phase impacts under the Refinery.

The monitoring network at the Refinery consists of 131 locations. There are 113 monitoring wells: 95 monitoring wells in the Chinle/Alluvium aquifer, 13 monitoring wells in the Sonsela aquifer, and 5 monitoring wells in the Alluvial/Fluvial upper sand aquifer. In addition to the monitoring wells, there are also three water-production wells at the Refinery: PW-2, PW-3, and PW-4. There are 11 surface water samples collected at the EPs (EP-2 through EP-12). Three Leak Detection Units are monitored associated with the New American Petroleum Institute Separator. There is also one surface monitoring location near the EPs, identified as STP-1 to EP-2.

The monitoring program network is sampled quarterly, semiannually, and annually. The frequency of the monitoring program is listed in Table 3-1. Field logs are provided in Appendix A and fluid level information is presented in Appendix B. Laboratory reports and data validation reports are provided in Appendices C and D, respectively.

3.1 Groundwater Monitoring Network and Surface Sample Locations

The monitoring well program is broken into nine groups. The groups were selected based on areas of the Refinery and are organized from upstream to downstream. The nine groups are presented below and shown on Figure 3-1:

- Eastern Boundary
- Tank Farm
- Marketing Tank Farm (MKTF)
- Solid Waste Management Unit 1
- Land Treatment Unit
- EPs
- Western Boundary
- Deep Monitoring Wells
- Water-Production Wells



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3.2 Regulatory Criteria

Groundwater analytical monitoring results are compared to the following cleanup levels:

- Water Quality Control Commission (WQCC) New Mexico Administrative Code (NMAC) 20.6.2.3103
- EPA Drinking Water Maximum Contaminant Levels (MCL) (EPA 2022)
- NMED Tap Water Screening Levels (NMED 2021)
- EPA Tap Water Screening Levels, Hazard Quotient of 1.0 (EPA 2021)
- NMED Total Petroleum Hydrocarbon Levels (NMED 2021)

Per the RCRA Post-Closure Permit (NMED 2017) Section IV.D.1,

“the cleanup levels for all contaminants in groundwater shall be the WQCC groundwater quality standards, 20.6.2.3103 NMAC, the cleanup levels for toxic pollutants calculated in accordance with 20.6.2.7.WW NMAC, and the drinking water MCLs adopted by EPA under the federal Safe Drinking Water Act (42 U.S.C. §§ 300f to 300j-26) or the New Mexico Environmental Improvement Board, 20.7.10 NMAC. If both a WQCC water quality standard and an MCL have been established for an individual substance, then the lower of the levels shall be the cleanup level for that substance.

The most recent version of NMED’s Tap Water Screening Levels listed in Table A-1 of Technical Background Document for Development of Soil Screening Levels (as updated) shall be used to establish the cleanup level if either a WQCC standard or an MCL has not been established for a specific substance. In the absence of an NMED tap water screening level then the EPA Regional Screening Levels for Chemical Contaminants at Superfund Sites for tap water shall be used.”

Cleanup levels were evaluated as required by the RCRA Post-Closure Permit (NMED 2017). Table 3-2 presents the appropriate cleanup levels for analytical result comparison. Analytical results are discussed in Section 5.0 and the appropriate cleanup levels are noted in the Section 5.0 tables.

3.3 Deviations from 2020 Work Plan

During 2021, field activities were conducted in accordance with the 2020 Work Plan (Western LLC 2021b) with the following exceptions:

- Monitoring wells were not sampled if SPH was detected, or a sheen identified during the monitoring period: 35 wells in first quarter, 32 wells in second quarter, 31 wells in third quarter, and 32 wells in fourth quarter. Monitoring wells with SPH are noted in Table 3-1 and Appendix B-1.



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- Monitoring wells without sufficient water (5 wells in first quarter, 13 wells in second quarter, 14 wells in third quarter, and 9 wells in fourth quarter) or not accessible (4 wells in first quarter, 5 wells in second quarter, and 4 wells in fourth quarter) were not sampled during the monitoring period. Monitoring wells meeting these criteria are noted in Table 3-1 and Appendix B-1.
- Five new wells were completed in 2021 and sampled in third and fourth quarter. Those wells are: OW-12A, OW-70, OW-66, OW-67, and OW-68.
- Six wells were plugged and abandoned, and new wells installed. MKTF-01, MKTF-02, MKTF-04, MKTF-17, MKTF-18, and RW-2 were sampled during first and second quarter, if SPH was not present. Monitoring wells MKTF-01R, MKTF-02R, MKTF-04R, MKTF-17R, MKTF-18R, and RW-2R were sampled during third and fourth quarter, if SPH was not present.
- Some reporting limits were above their respective cleanup levels and are noted in Tables 5-1 through 5-6 with italics.
- Some monitoring wells had field parameters outside of the stabilization criteria prior to sample collection. Field parameter measurements taken for the purpose of stabilization are provided on the field forms in Appendix A.
- Some analytical data were rejected based on data validation of the results. These data are discussed in Section 5.3.1 and provided in Appendix D.

The 2021 Work Plan (Western LLC 2022a) was not yet approved at the time the 2021 field work was conducted. However, NMED requests for sample collection and reporting that were made in comments received from NMED were implemented, where possible, as detailed below.

- Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western LLC 2021a):
 - 1,4-Dioxane was analyzed in wells LDU-West, OW-50, OW-52, and SMW-4 samples per Comments 7 and 13.
 - Total and dissolved uranium analyses were removed first through third quarters in 2021 per Comment 21. Samples were inadvertently analyzed for total and dissolved uranium during fourth quarter.
 - 1,2-Dibromoethane (EDB) was analyzed by method 8011 per Comment 22.
 - Pesticide analyses were removed from samples EP-3, EP-12A and EP-12B per Comment 26.
 - Per- and Polyfluoroalkyl Substances (PFAS) were analyzed at well OW-63 per Comment 30.



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- Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western Inc. 2021a):
 - Mercury data are presented in micrograms per liter per Comment 14.
- Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western Inc. 2021b)
 - Pesticides were sampled at EP-2 during the second quarter, even though Comment 5 allowed for sampling in 2022.
- Response to Disapproval, 2020 Annual Groundwater Monitoring Report (Western LLC 2022b):
 - Dissolved-phase impacts in well OW-56 potentially resulting from recovery activities conducted in wells OW-54 and OW-55 are discussed in Section 5.2 per Comment 11.
 - Well fluid recovery information is provided in Section 6.0 per Comment 27.



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4.0 Fluid Level Results

Fluid levels are measured monthly, quarterly, semiannually, and annually depending on the monitoring well. Fluid level data and SPH measurements collected during 2021 are summarized in Table 4-1. Table 4-1 also provides the five most recent fluid level monitoring events for each location in the groundwater monitoring network. The following sub-sections discuss the potentiometric surface maps and SPH detections and thicknesses. Historical fluid level measurements and hydrographs are included as Appendix B-1 and Appendix B-2, respectively.

4.1 Potentiometric Surface

Potentiometric surface maps were prepared using the third quarter (annual) monitoring event data.

The potentiometric surface is consistent throughout the year and the third quarter data is representative of the entire groundwater elevation data set for the year. Figures 4-1 through 4-3 illustrate the potentiometric surfaces at the Refinery based on fluid levels measured in each of the three aquifers. Prevailing groundwater flow in the Refinery is from the southeast towards the northwest. However, in the tank farm, the flow is generally in a northeastern direction and in the southern marketing tank farm area the flow is generally in a western direction.

The Alluvial/Fluvial upper sand aquifer is monitored with five groundwater monitoring wells (BW-1A, BW-2A, BW-3A, BW-4A, and BW-5A) (Figure 4-1). Monitoring wells BW-1A, BW-3A, BW-4A, and BW-5A are consistently dry throughout the sampling events. BW-2A is the only well that had enough water in 2021 to calculate a fluid level elevation; therefore, a potentiometric surface for this area of the refinery cannot accurately be depicted.

The Chinle/Alluvium aquifer includes monitoring wells across the Refinery (Figure 4-2). A total of 95 monitoring wells were gauged during the third quarter of 2021. Groundwater elevations have remained generally consistent with previous events.

The Sonsela aquifer includes monitoring wells outside of the Refinery process area and tank farm (Figure 4-3). BW-5C and OW-12 are on the west end of the property and are considered artesian, so they will commonly have negative depth-to-water values from the water being pulled up into the well casing. These monitoring wells are excluded from the potentiometric surface calculations. Groundwater elevations have remained generally consistent with previous monitoring events.

4.2 SPH Detections

SPH measurements were monitored as part of fluid level monitoring. In addition, SPH occurrences were evaluated in the "Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report" (Western Inc. 2022), "Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report Addendum" (Western LLC 2021d), and "Tank 570 Release and Additional Areas Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report" (Western LLC 2021c).



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Monitoring wells with SPH and calculated SPH thicknesses are summarized in Table 4-1. Monitoring wells with measurable SPH for the third quarter of 2021 are shown on Figure 4-4. Throughout the site, measured SPH thickness in wells for 2021 has been generally consistent with previous monitoring events.

SPH thicknesses measured in 2021 are generally consistent or slightly lower than historical data across the site with the exception of wells ~~MKTF-13, MKTF-17, MKTF-39~~, MKTF-48, ~~MKTF-50~~, GWM-1, OW-61, ~~and OW-65~~, RW-1, and RW-6 where SPH thickness increased slightly. SPH was detected in MKTF-49 and MKTF-50 in the second half 2021 for the first time. These monitoring wells will continue to be monitored on a quarterly basis. New wells MKTF-01R, MKTF-04R, and MKTF-17R have not had any SPH detections even though the wells they replaced (MKTF-01, MKTF-04, and MKTF-17, respectively) historically had SPH. New wells MKTF-02R and MKTF-18R have not had any SPH detections which is consistent with the wells they replaced (MKTF-02 and MKTF-18). SPH recovery efforts continued during 2021 and are discussed in Section 6.0.



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5.0 Sampling Results

Groundwater quality monitoring was performed in accordance with the 2020 Work Plan (Western LLC 2021b) and the 2021 Analyte List (Western LLC 2022a). A summary of the monitoring events and sample locations is presented in Table 3-1. Some monitoring wells were not sampled due to measurable SPH, insufficient water, or inability to access well. Monitoring program locations that did not contain detectable SPH during fluid level monitoring and had adequate water levels were sampled. The samples were analyzed by Hall Environmental Analysis Laboratory. The analytical data were compared to the cleanup levels, as detailed in Section 3.2.

Specific laboratory analyses performed on samples from each monitoring locations are detailed in the 2020 Work Plan (Western LLC 2021b) and the 2021 Analyte List (Western LLC 2022a). Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total and dissolved metals, and general chemistry analyses were performed (Tables 5-1 through 5-5). Field parameters were also collected prior to sample collection (Table 5-6). 2021 field logs are included in Appendix A, 2021 analytical laboratory reports are included in Appendix C, and Tier II data validation reports are provided in Appendix D.

As discussed in Section 3.3, EDB was added to the analyte list and analyzed via method 8011. These data are included in Table 5-1. Pesticides were added to the analyte list for EP-2 and included in Table 5-2**b**. PFAS were added to the analyte list for OW-63 and these data are included in Table 5-7.

5.1 Analytical Results

The analytical results are shown in Tables 5-1 through 5-5 and notable findings are described in Section 5.2. The analytical tables include the results from the 2021 monitoring events and the previous three monitoring events. VOCs are presented in Table 5-1, ~~and~~ SVOCs are presented in Table 5-2**a**, ~~and pesticides are presented in Table 5-2b~~. Total and dissolved metal analytical results are presented in Tables 5-3 and 5-4, respectively. General chemistry analyses are presented in Table 5-5. PFAS analyses are presented in Table 5-7. Analytical results that exceeded the appropriate cleanup levels are noted in Tables 5-1 through 5-5 and 5-7 as bolded values. Non-detected sampling results with reporting limits greater than the appropriate cleanup levels are noted by italics in the tables.

~~All~~ Data provided by analyses where the limit of detection values exceed the cleanup levels are considered data quality exceptions and will not be used to demonstrate compliance. These data quality exceptions are identified by italicized font and presented in Tables 5-1 through 5-5 and 5-7.

Furthermore, ~~all~~ data quality exceptions are identified in the tables where the data are presented and will continue in all future submittals.

Analytical results for benzene, toluene, ethylbenzene, and total xylenes and methyl tert-butyl ether for individual well groups are presented on Figures 5-1 through 5-9. Results that exceeded the cleanup



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levels are denoted as bolded and highlighted values. Other constituents were detected in the monitoring wells (Tables 5-1 through 5-5 and 5-7) but are not included on the figures.

5.2 Discussion of New Findings

Data collected in 2021 were generally consistent with previous events. No significant new findings were noted with the exceptions presented in the following paragraphs.

Per the Refinery's response to Comment 22 in the "Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019" (Western LLC 2021a), samples were collected and analyzed for EDB during all four quarters. EDB was analyzed by methods 8011 and 8260 during first and second quarters and generally analyzed by 8011 during the third and fourth quarters. Data from both methods are presented in Table 5-1. EDB will be sampled by method 8011 during 2022 (Suzuki 2022).

Per the Refinery's response to Comment 30 in the "Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western LLC 2021a), PFAS were analyzed at well OW-63. PFAS samples were collected during all four quarters; however, the first quarter samples were not collected following approved PFAS sampling protocols. Although the first quarter data are included in the laboratory data appendix, the data are not considered valid. The PFAS data are provided in Table 5-7. PFAS will be sampled during 2022 at well OW-63 (Suzuki 2022).

Per the Refinery's response to Comment 5 in the "Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western Inc. 2021b), pesticides were sampled at EP-2 during the second quarter. No additional pesticide samples were collected from EP-2 in the subsequent quarters; however, pesticides will be sampled during 2022 at EP-2 (Suzuki 2022).

Per the Refinery's response to Comment 11 of the NMED "Disapproval, 2020 Annual Groundwater Monitoring Report" (Western LLC 2022b), the Refinery agreed to evaluate whether groundwater recovery conducted at wells OW-54 and OW-55 was potentially impacting dissolved-phase constituent concentrations in OW-56. As shown on Figure 4-2, the potentiometric surface is 6,900.38 ft above mean sea level (amsl) in Well OW-54, 6,904.78 ft amsl in OW-55, and 6,905.80 ft amsl in OW-56. In this area of the Refinery, water is flowing from well OW-56 towards wells OW-54 and OW-55, which is consistent for the data collected in 2020 and 2021. Therefore, wells OW-54 and OW-55 are not influencing the dissolved phase constituent concentrations detected in OW-56. These wells will continue to be monitored quarterly.

5.3 QA/QC Analytical Results

Quality assurance/quality control (QA/QC) groundwater samples were collected during the groundwater monitoring and sampling events and were submitted for laboratory analyses. The analytical data reported from the receiving laboratory underwent Tier I and Tier II data validation by Trihydro's chemical data validation services group. Data qualified are presented in their respective tables, as listed



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in previous sections, where relevant. The Tier II data validation reports are provided in Appendix D. A summary of qualifiers and QA/QC sample results are discussed in the sections below.

The following qualifiers were applied to the analytical data collected during 2021:

- J – estimated concentration
- J+ – estimated concentration, biased high
- J- – estimated concentration, biased low
- UJ – estimated reporting limit
- U – evaluated to be undetected at the reporting limit
- JB – estimated concentration due to blank contamination
- R – rejected, data not usable

5.3.1 Rejected Data

Out of the 2021 data packages, 99.5 percent of the data received from the laboratory were acceptable with approximately 0.5 percent of the data rejected during the 2021 monitoring events. Rejected data were observed during all four quarters. These data were qualified based on holding time exceedances, laboratory control sample/laboratory control sample duplicate percent recoveries, matrix spike/matrix spike duplicate recoveries or surrogate recoveries. Rejected data are presented in their respective tables and explanations of the qualifiers can be found in the data validation reports provided in the following Appendices:

- Appendix D-1 – Reports 2103532, 2103142, and 2103470
- Appendix D-2 – Reports 2106B77, 2106D55, 2106B14, 2106976, 2106895, and 2106646
- Appendix D-3 – Reports 2109709, 2109D30, and 2109C62
- Appendix D-4 – Reports 2112902, 2112658, 2112634, 2112997, and 2112B70

5.3.2 Field Blanks

Thirty-seven field blank samples were collected during 2021. The field blanks were collected daily by adding distilled water to sample bottles in the field. Acetone, 2-butanone, and toluene were detected in field blanks collected during the first and third quarters. Target analytes detected in the associated samples at concentrations less than the reporting limit were qualified as U. Detections that were greater than the blank detection but less than 10 times the blank concentration were qualified as J.



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5.3.3 Trip Blanks

Thirty-three trip blank samples were collected during 2021. Trip blanks are provided by the laboratory and are kept with the sample coolers during shipment to and from the laboratory. Benzene was detected during the first quarter sampling event on March 2, 2021. Target analytes detected in the associated samples at concentrations less than the reporting limit were qualified as U. Detections that were greater than the blank detection but less than 10 times the blank concentration were qualified as JB. Non-detections of the target analytes in the associated samples and results greater than 10 times the blank detection did not require qualification.

5.3.4 Equipment Blanks

Thirty-three equipment blank samples were collected during 2021. Equipment blanks were collected by cleaning reusable equipment and then collecting a sample from the equipment using distilled water. Thirty-five analytes were detected in the equipment blanks. Target analytes detected in the associated samples at concentrations less than the reporting limit were qualified as U. Detections that were greater than the blank detection but less than 10 times the blank concentration were qualified as JB. Non-detections of the target analytes in the associated samples and results greater than 10 times the blank detection did not require qualification.

5.3.5 Field Duplicates

Duplicate samples were collected during all sample events of 2021. Forty duplicate samples were collected during the sampling events. The analytical results for the duplicate samples are included with their parent samples in previous tables. Relative percent difference (RPD) values were calculated and compared to the data validation quality control limit of 30 percent. RPD values greater than 30 percent were qualified as J due to evidence of poor precision. RPD values that exceeded 100 percent were assigned J qualifiers if detected in the associated samples and UJ qualifiers if not detected due to evidence of moderately poor precision.



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6.0 Remediation Activities

Fluid recovery at the Refinery is reported quarterly in the Hydrocarbon Interim Measures Seep Reports. Remediation activities include vacuum truck recovery in the standpipe and retention ditch, borrow pit sumps, and wells.

Recovery data for 2021 is presented in Tables 6-1 (standpipe and retention ditch recovery), 6-2 (sump recovery), and 6-3 (well recovery). These activities will continue to be reported to NMED on a quarterly basis in the Hydrocarbon Interim Measures Seep Reports.



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7.0 Conclusions

Based on the 2021 groundwater gauging and analytical results, the following conclusions are presented:

- The groundwater monitoring wells screened in the Alluvial/Fluvial upper sand aquifer were consistently dry in 2021. BW-2A had water detected during the third quarter of 2021. The fluid levels in the groundwater monitoring wells screened in the Chinle/Alluvium aquifer and Sonsela aquifer remained generally consistent with previous events.
- The presence and distribution of SPH in 2021 is generally consistent with , or slightly lower than historical monitoring data except for wells ~~MKTF-13, MKTF-17, MKTF-39,~~ MKTF-48, ~~MKTF-50,~~ GWM-1, OW-61, ~~and~~ OW-65, RW-1, and RW-6 where SPH thickness increased slightly when compared to historical values.
- Based on the potentiometric surface map for the Chinle/Alluvium aquifer, water is flowing from well OW-56 towards wells OW-54 and OW-55, which is consistent for the data collected in 2020 and 2021. Therefore, wells OW-54 and OW-55 are not influencing the dissolved phase constituent concentrations detected in OW-56. These wells will continue to be monitored quarterly.
- Recovery activities will continue to take place and will be summarized in the Hydrocarbon Interim Measures Seep Reports, submitted quarterly to NMED.

Gauging and sampling requirements will continue in accordance with the most current NMED-approved Facility-Wide Groundwater Monitoring Work Plan. The 2022 Annual Groundwater Monitoring Report will be submitted no later than March 31, 2023. Site assessments will take place as required and NMED will be notified of remediation activities.



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8.0 References

Environmental Protection Agency (EPA). 2021. Regional Screening Levels, Hazardous Quotient 1.0. November.

EPA. 2022. National Primary Drinking Water Regulations. Available at: <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>.

New Mexico Environment Department (NMED). 2017. Final RCRA Post-Closure Permit, Western Refining Southwest, Inc., Gallup Refinery, EPA ID NM No. NM000333211. September.

NMED. 2021. Risk Assessment Guidance for Investigations and Remediation, Tables A-1 and 6-4. November.

NMED. 2022. Approval with Modifications, Response to Second Disapproval Facility Wide Groundwater Monitoring Work Plan – Updates for 2021, Western Refining Southwest Inc., Gallup Refinery, McKinley County, Gallup, New Mexico, EPA ID # NMD000333211, HWB-WRG-21-006. February 28.

Suzuki, M. 2022. Marathon Gallup Refinery – 2022 Groundwater Analyte List Approval. February 25 [Online]. Available email: Michiya.Suzuki@state.nm.us.

Western Refining Southwest, Inc. (Western Inc.). 2021a. Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019, Western Refining Southwest, Inc., Marathon Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-13. July 31.

Western Inc. 2021b. Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019, Western Refining Southwest, Inc., Marathon Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-13. December 17.

Western Inc. 2022. Approval with Modifications, [Revised] Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report, Western Refining Southwest, Inc., Marathon Gallup Refinery, EPA ID #NM000333211, HWB-WRG-21-007. March 3.



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Western Refining Southwest LLC (Western LLC). 2021a. Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-13. March 31.

Western LLC. 2021b. Approval with Modifications, Disapproval Facility Wide Ground Water Monitoring Work Plan – Updates for 2020, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-012. March 25.

Western LLC. 2021c. Tank 570 Release and Additional Areas Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery, EPA ID# NMD000333211. November 1.

Western LLC. 2021d. Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report Addendum, Western Refining Southwest LLC, D/B/A/ Marathon Gallup Refinery, EPA ID# NMD000333211. November 19.

Western LLC. 2022a. Response to Second Disapproval, Facility Wide Ground Water Monitoring Work Plan – Updates for 2021, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery EPA ID# NMD000333211/HWB-WRG-21-006. January 31.

Western LLC. 2022b. Response to Disapproval, 2020 Annual Groundwater Monitoring Report, Western Refining Southwest LLC (DBA Marathon Gallup Refinery), EPA ID# NMD000333211, HWB-WRG-21-012. March 11.

ATTACHMENT C
REVISED 2021 ANNUAL GROUNDWATER MONITORING REPORT
(TWO HARD COPIES AND ELECTRONIC COPY)



Western Refining Southwest LLC
D/B/A Marathon Gallup Refinery
2021 Annual Groundwater Monitoring Report



**WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
2021 ANNUAL GROUNDWATER MONITORING
REPORT**

**MARCH 31, 2022
REVISED DECEMBER 7, 2022**



Western Refining Southwest LLC
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Executive Summary

Facility-wide groundwater monitoring activities were completed at the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery), during 2021. Activities included fluid level gauging, analytical sampling, and separate phase hydrocarbon recovery (SPH). Groundwater monitoring at the Refinery was conducted in accordance with the Resource Conservation and Recovery Act Post-Closure Permit (NMED 2017) and the 2020 Annual Facility-Wide Groundwater Monitoring Work Plan (2020 Work Plan) (Western LLC 2021b). The Work Plan was approved with modification by New Mexico Environment Department (NMED) on February 16, 2021.

The groundwater monitoring network at the Refinery consisted of 131 locations, which includes monitoring wells, water-production wells, surface sample locations, and leak detection units. These locations were sampled quarterly, semiannually, and annually as specified in the 2020 Work Plan. Fluid levels were measured monthly, quarterly, semiannually, and annually. Depth to water and SPH measurements were collected during 2021. These results were consistent with historical monitoring.

The groundwater monitoring analytical results were compared to the New Mexico Administrative Code Water Quality Commission 20.6.2.3103 Levels, Environmental Protection Agency (EPA) Maximum Contaminant Levels, NMED Tap Water Screening Levels, and EPA Tap Water Screening Levels. Analytical results were consistent with historical results.

Recovery activities were conducted in 2021 and were summarized in the Hydrocarbon Interim Measures Seep Reports submitted quarterly to NMED. SPH recovery efforts appear to be having a positive impact on SPH thicknesses across the site.

Gauging and sampling requirements will continue in 2022 and will meet the most current NMED-approved Facility-Wide Groundwater Monitoring Work Plan. The 2022 Annual Groundwater Monitoring Report will be submitted no later than March 31, 2023. Recovery activities will continue to take place and will be summarized in the Hydrocarbon Interim Measures Seep Reports, submitted quarterly to NMED. Site assessments will take place as required and NMED will be notified of remediation activities.



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List of Acronyms

1,2-Dibromoethane	EDB
2020 Work Plan	2020 Groundwater Monitoring Work Plan
2021 Analyte List	2021 Groundwater Monitoring Work Plan Analyte List
amsl	above mean sea level
EP	Evaporation Pond
EPA	Environmental Protection Agency
ft	foot/feet
ft/d	feet per day
I-40	Interstate 40
MCL	Maximum Contaminant Levels
MKTF	Marketing Tank Farm
NM	New Mexico
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
PFAS	Per- and Polyfluoroalkyl Substances
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
Refinery	Western Refining Southwest LLC (DBA Marathon Gallup Refinery)
Report	2021 Annual Groundwater Monitoring Report
RPD	relative percent difference
SPH	separate phase hydrocarbon
SVOC	semi-volatile organic compound
VOC	volatile organic compound
WQCC	Water Quality Control Commission



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1.0 Introduction

This 2021 Annual Groundwater Monitoring Report (Report) documents the groundwater gauging and sampling events for 2021, as it pertains to the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery). This Report is submitted pursuant to the Refinery's Resource Conservation and Recovery Act (RCRA) Post-Closure Permit (NM000333211) (NMED 2017) and contains the information the Refinery is required to report annually.

The Refinery is located at Exit 39 on Interstate 40 (I-40), approximately 17 miles east of Gallup, New Mexico (NM), in Jamestown, NM (Figure 1-1). Gauging and sampling activities were conducted in accordance with the 2020 Groundwater Monitoring Work Plan (2020 Work Plan) (Western LLC 2021b), which was approved with Modification by New Mexico Environment Department (NMED) on February 16, 2021. Although the 2021 Groundwater Monitoring Work Plan was not approved until February 28, 2022 (NMED 2022), the Refinery used the 2021 Groundwater Monitoring Work Plan Analyte List (2021 Analyte List) (Western LLC 2022a).

1.1 Refinery Information

Built in the 1950s, the Refinery is located within a rural and sparsely populated area east of Gallup, NM. The nearest population centers are the Pilot Flying J Travel Center refueling plaza, the I-40 corridor, and a small cluster of residential homes located on the south side of I-40 approximately 2 miles southwest of the Refinery (Jamestown).

The Refinery has been indefinitely idled since October 9, 2020. During operation, the Refinery was a crude oil refining and petroleum products manufacturing facility. There were no organic chemicals, plastics, or synthetic fibers manufactured that contributed to the process flow of wastewater. As a result of the processing steps, the Refinery produced a wide range of petroleum products including propane, butane, unleaded gasoline, diesel, residual fuel, and commercial products of fertilizer and solid elemental sulfur. The Refinery did not manufacture lubricating oils.

Historically, the Refinery primarily received crude oil via two 6-inch diameter pipelines, which entered the Refinery property from the north (Four Corners Area). In addition, the Refinery also received natural gasoline feedstock via a 4-inch diameter pipeline that came in from the west along the I-40 corridor from the Western Refining Southwest LLC – Wingate Plant, which is also indefinitely idled. Crude oil and other products also arrived at the Refinery via railroad cars. These feed stocks were then stored in tanks until refined into products.



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1.2 Report Presentation

This Report presents the 2021 monitoring program as follows:

- Site Conditions – Site topography, surface water, and hydrogeology conditions are presented in Section 2.0.
- Monitoring Program – The groundwater and surface water program network are provided. In addition, regulatory criteria selection and 2020 Work Plan deviations are described. This information is presented in Section 3.0.
- Fluid Level Gauging – Fluid levels are measured at the Refinery on a monthly, quarterly, semiannual, and annual basis. Results for groundwater fluid levels were generally similar to those measured in prior years. These data are detailed in Section 4.0.
- Analytical Groundwater Data – Groundwater samples are collected quarterly and annually. Results for groundwater samples are compared to the appropriate New Mexico Environment Department (NMED) and the Environmental Protection Agency (EPA) cleanup levels. The analytical results are discussed in Section 5.0.
- Analytical Evaporation Pond Data – Evaporation Pond (EP) samples are collected semiannually as surface water samples. Results for the surface water samples are compared to the appropriate NMED and EPA cleanup levels. The analytical results are discussed in Section 5.0.
- Analytical Outfall Data – STP-1 to EP-2 is monitored quarterly. STP-1 to EP-2 was sampled during 2021. Results for the outfall samples are compared to the appropriate NMED and EPA cleanup levels. The analytical results are discussed in Section 5.0.
- Remediation Activities – Ongoing recovery activities take place at the Refinery. Activities completed in 2021 are described in Section 6.0.



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2.0 Site Conditions

The Refinery is located within a rural and sparsely populated section of McKinley County, NM. It is situated in the high desert plain on the western flank of the Continental Divide approximately 17 miles east of Gallup, NM (Figure 1-1). The surrounding land is comprised primarily of public and private lands used for cattle and sheep grazing.

2.1 Site Topography

Local topography consists of a gradually inclined down-slope from high ground in the southeast to a lowland fluvial plain in the northwest. The highest point on Refinery property is located at the southeast corner boundary (elevation approximately 7,040 feet [ft]) and the lowest point is located at the northwest corner boundary (elevation approximately 6,860 ft). Surface soils within most of the area of investigation are primarily Rehobeth silty clay loam. The Refinery is located on a flat man-made terrace.

2.2 Surface Water

Surface water in the Refinery consists of the man-made EPs and aeration basins (Figure 2-1). There are several storm water conveyance ditches located throughout the Refinery. These ditches are discharged into contained basins where storm water is collected and allowed to evaporate or discharged through two National Pollutant Discharge Elimination System (NPDES) outfalls (NPDES Permit #NMR053168).

The hydrocarbon seep area is routinely monitored to evaluate the discharge of hydrocarbons to the land surface where shallow water discharges have been observed within the retention ditch and to the south near the original seep location. The borrow pit seep area is routinely inspected for indications of separate phase hydrocarbon (SPH) and it found consistently found to be dry in 2021. The hydrocarbon seep area and borrow pit seep area are shown on Figure 2-1 and more information can be found in the quarterly Hydrocarbon Interim Measures Seep Reports.

2.3 Geology

Site boring logs indicate that subsurface fluvial and alluvial soils are primarily comprised of clays and silts with discontinuous inter-bedded sand layers. Very low permeability bedrock (e.g., claystones and siltstones) underlie the surface soils. The Chinle Group, from the Upper Triassic period, crops out over a large area south of the Refinery. The uppermost subunit within the Chinle Group is the Petrified Forest Formation, which is also sometimes referred to as the Petrified Forest Member. Inter-bedded within the Chinle Group is the Sonsela Sandstone bed, which lies within and parallels the dip of the Chinle Group. Its high point is located southeast of the Refinery and slopes downward to the northwest as it passes under the Refinery. Due to the hydraulic confinement of the Petrified Forest Formation aquitard, the Sonsela Sandstone bed acts as a water-bearing reservoir and is artesian at its lower extremis. Artesian conditions exist through much of the central and western portions of the Refinery.



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2.4 Hydrogeology

Groundwater flow within the shallow alluvium and the upper Chinle Formation is highly variable due to the presence of complex and irregular stratigraphy including sand stringers, cobble beds, and dense clay layers. Hydraulic conductivity ranges from 30 ft per day (ft/d) for gravelly sands immediately overlying the Petrified Forest Formation to 3×10^{-5} ft/d in the clay soils located near the surface. Groundwater flow within the Lower Chinle Formation is extremely slow and typically averages less than 2.83×10^{-7} ft/d (i.e., less than 0.01 ft per year).

Water level data are collected routinely at the Refinery. Wells at the Refinery have been categorized based on the hydrogeologic unit in which they are screened, including the alluvial/fluvial upper sand aquifer, the Chinle/alluvium aquifer, and the Sonsela Sandstone aquifer. The alluvial/fluvial upper sand aquifer has a limited areal extent, existing only on the western margin on the Refinery. Groundwater occurrence in this aquifer is sporadic and limited.

The majority of the wells monitored lie within the shallow weathered sediments that comprise the Chinle/alluvium aquifer. Within the Chinle/alluvium aquifer, shallow groundwater located under the Refinery property generally flows along the upper contact of the Chinle Formation. The prevailing flow is from the southeast to the northwest, although localized areas may have varying flow directions based on the subsurface geology.

Groundwater within the Sonsela flows southeast to northwest. Hydraulic heads measured within the Sonsela are generally lower than those observed within the shallow aquifer near the topographic high on which the Refinery process area and tank farm are situated, and higher than those observed within the shallow aquifer in topographically low areas to the west and northwest, near the EPs. The higher head in the Sonsela in low areas is due to confining pressure from lower permeability Chinle Formation bedrock between the shallow Chinle/alluvium aquifer and the Sonsela Sandstone bed at depth, which makes the Sonsela Sandstone aquifer locally artesian.



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3.0 Monitoring Program

The monitoring program at the Refinery is conducted pursuant to the RCRA Post-Closure Permit (NMED 2017), the 2020 Work Plan (Western LLC 2021b), and the 2021 Analyte List (Western LLC 2022a). The monitoring program was completed to provide a comprehensive understanding of the dissolved phase impacts under the Refinery.

The monitoring network at the Refinery consists of 131 locations. There are 113 monitoring wells: 95 monitoring wells in the Chinle/Alluvium aquifer, 13 monitoring wells in the Sonsela aquifer, and 5 monitoring wells in the Alluvial/Fluvial upper sand aquifer. In addition to the monitoring wells, there are also three water-production wells at the Refinery: PW-2, PW-3, and PW-4. There are 11 surface water samples collected at the EPs (EP-2 through EP-12). Three Leak Detection Units are monitored associated with the New American Petroleum Institute Separator. There is also one surface monitoring location near the EPs, identified as STP-1 to EP-2.

The monitoring program network is sampled quarterly, semiannually, and annually. The frequency of the monitoring program is listed in Table 3-1. Field logs are provided in Appendix A and fluid level information is presented in Appendix B. Laboratory reports and data validation reports are provided in Appendices C and D, respectively.

3.1 Groundwater Monitoring Network and Surface Sample Locations

The monitoring well program is broken into nine groups. The groups were selected based on areas of the Refinery and are organized from upstream to downstream. The nine groups are presented below and shown on Figure 3-1:

- Eastern Boundary
- Tank Farm
- Marketing Tank Farm (MKTF)
- Solid Waste Management Unit 1
- Land Treatment Unit
- EPs
- Western Boundary
- Deep Monitoring Wells
- Water-Production Wells



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3.2 Regulatory Criteria

Groundwater analytical monitoring results are compared to the following cleanup levels:

- Water Quality Control Commission (WQCC) New Mexico Administrative Code (NMAC) 20.6.2.3103
- EPA Drinking Water Maximum Contaminant Levels (MCL) (EPA 2022)
- NMED Tap Water Screening Levels (NMED 2021)
- EPA Tap Water Screening Levels, Hazard Quotient of 1.0 (EPA 2021)
- NMED Total Petroleum Hydrocarbon Levels (NMED 2021)

Per the RCRA Post-Closure Permit (NMED 2017) Section IV.D.1,

“the cleanup levels for all contaminants in groundwater shall be the WQCC groundwater quality standards, 20.6.2.3103 NMAC, the cleanup levels for toxic pollutants calculated in accordance with 20.6.2.7.WW NMAC, and the drinking water MCLs adopted by EPA under the federal Safe Drinking Water Act (42 U.S.C. §§ 300f to 300j-26) or the New Mexico Environmental Improvement Board, 20.7.10 NMAC. If both a WQCC water quality standard and an MCL have been established for an individual substance, then the lower of the levels shall be the cleanup level for that substance.

The most recent version of NMED’s Tap Water Screening Levels listed in Table A-1 of Technical Background Document for Development of Soil Screening Levels (as updated) shall be used to establish the cleanup level if either a WQCC standard or an MCL has not been established for a specific substance. In the absence of an NMED tap water screening level then the EPA Regional Screening Levels for Chemical Contaminants at Superfund Sites for tap water shall be used.”

Cleanup levels were evaluated as required by the RCRA Post-Closure Permit (NMED 2017). Table 3-2 presents the appropriate cleanup levels for analytical result comparison. Analytical results are discussed in Section 5.0 and the appropriate cleanup levels are noted in the Section 5.0 tables.

3.3 Deviations from 2020 Work Plan

During 2021, field activities were conducted in accordance with the 2020 Work Plan (Western LLC 2021b) with the following exceptions:

- Monitoring wells were not sampled if SPH was detected, or a sheen identified during the monitoring period: 35 wells in first quarter, 32 wells in second quarter, 31 wells in third quarter, and 32 wells in fourth quarter. Monitoring wells with SPH are noted in Table 3-1 and Appendix B-1.



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- Monitoring wells without sufficient water (5 wells in first quarter, 13 wells in second quarter, 14 wells in third quarter, and 9 wells in fourth quarter) or not accessible (4 wells in first quarter, 5 wells in second quarter, and 4 wells in fourth quarter) were not sampled during the monitoring period. Monitoring wells meeting these criteria are noted in Table 3-1 and Appendix B-1.
- Five new wells were completed in 2021 and sampled in third and fourth quarter. Those wells are: OW-12A, OW-70, OW-66, OW-67, and OW-68.
- Six wells were plugged and abandoned, and new wells installed. MKTF-01, MKTF-02, MKTF-04, MKTF-17, MKTF-18, and RW-2 were sampled during first and second quarter, if SPH was not present. Monitoring wells MKTF-01R, MKTF-02R, MKTF-04R, MKTF-17R, MKTF-18R, and RW-2R were sampled during third and fourth quarter, if SPH was not present.
- Some reporting limits were above their respective cleanup levels and are noted in Tables 5-1 through 5-6 with italics.
- Some monitoring wells had field parameters outside of the stabilization criteria prior to sample collection. Field parameter measurements taken for the purpose of stabilization are provided on the field forms in Appendix A.
- Some analytical data were rejected based on data validation of the results. These data are discussed in Section 5.3.1 and provided in Appendix D.

The 2021 Work Plan (Western LLC 2022a) was not yet approved at the time the 2021 field work was conducted. However, NMED requests for sample collection and reporting that were made in comments received from NMED were implemented, where possible, as detailed below.

- Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western LLC 2021a):
 - 1,4-Dioxane was analyzed in wells LDU-West, OW-50, OW-52, and SMW-4 samples per Comments 7 and 13.
 - Total and dissolved uranium analyses were removed first through third quarters in 2021 per Comment 21. Samples were inadvertently analyzed for total and dissolved uranium during fourth quarter.
 - 1,2-Dibromoethane (EDB) was analyzed by method 8011 per Comment 22.
 - Pesticide analyses were removed from samples EP-3, EP-12A and EP-12B per Comment 26.
 - Per- and Polyfluoroalkyl Substances (PFAS) were analyzed at well OW-63 per Comment 30.



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- Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western Inc. 2021a):
 - Mercury data are presented in micrograms per liter per Comment 14.
- Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western Inc. 2021b)
 - Pesticides were sampled at EP-2 during the second quarter, even though Comment 5 allowed for sampling in 2022.
- Response to Disapproval, 2020 Annual Groundwater Monitoring Report (Western LLC 2022b):
 - Dissolved-phase impacts in well OW-56 potentially resulting from recovery activities conducted in wells OW-54 and OW-55 are discussed in Section 5.2 per Comment 11.
 - Well fluid recovery information is provided in Section 6.0 per Comment 27.



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4.0 Fluid Level Results

Fluid levels are measured monthly, quarterly, semiannually, and annually depending on the monitoring well. Fluid level data and SPH measurements collected during 2021 are summarized in Table 4-1. Table 4-1 also provides the five most recent fluid level monitoring events for each location in the groundwater monitoring network. The following sub-sections discuss the potentiometric surface maps and SPH detections and thicknesses. Historical fluid level measurements and hydrographs are included as Appendix B-1 and Appendix B-2, respectively.

4.1 Potentiometric Surface

Potentiometric surface maps were prepared using the third quarter (annual) monitoring event data. The potentiometric surface is consistent throughout the year and the third quarter data is representative of the entire groundwater elevation data set for the year. Figures 4-1 through 4-3 illustrate the potentiometric surfaces at the Refinery based on fluid levels measured in each of the three aquifers. Prevailing groundwater flow in the Refinery is from the southeast towards the northwest. However, in the tank farm, the flow is generally in a northeastern direction and in the southern marketing tank farm area the flow is generally in a western direction.

The Alluvial/Fluvial upper sand aquifer is monitored with five groundwater monitoring wells (BW-1A, BW-2A, BW-3A, BW-4A, and BW-5A) (Figure 4-1). Monitoring wells BW-1A, BW-3A, BW-4A, and BW-5A are consistently dry throughout the sampling events. BW-2A is the only well that had enough water in 2021 to calculate a fluid level elevation; therefore, a potentiometric surface for this area of the refinery cannot accurately be depicted.

The Chinle/Alluvium aquifer includes monitoring wells across the Refinery (Figure 4-2). A total of 95 monitoring wells were gauged during the third quarter of 2021. Groundwater elevations have remained generally consistent with previous events.

The Sonsela aquifer includes monitoring wells outside of the Refinery process area and tank farm (Figure 4-3). BW-5C and OW-12 are on the west end of the property and are considered artesian, so they will commonly have negative depth-to-water values from the water being pulled up into the well casing. These monitoring wells are excluded from the potentiometric surface calculations. Groundwater elevations have remained generally consistent with previous monitoring events.

4.2 SPH Detections

SPH measurements were monitored as part of fluid level monitoring. In addition, SPH occurrences were evaluated in the "Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report" (Western Inc. 2022), "Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report Addendum" (Western LLC 2021d), and "Tank 570 Release and Additional Areas Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report" (Western LLC 2021c).



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Monitoring wells with SPH and calculated SPH thicknesses are summarized in Table 4-1. Monitoring wells with measurable SPH for the third quarter of 2021 are shown on Figure 4-4. Throughout the site, measured SPH thickness in wells for 2021 has been generally consistent with previous monitoring events.

SPH thicknesses measured in 2021 are generally consistent or slightly lower than historical data across the site with the exception of wells MKTF-39, MKTF-48, MKTF-50, GWM-1, OW-61, OW-65, RW-1, and RW-6 where SPH thickness increased slightly. SPH was detected in MKTF-49 and MKTF-50 in the second half 2021 for the first time. These monitoring wells will continue to be monitored on a quarterly basis. New wells MKTF-01R, MKTF-04R, and MKTF-17R have not had any SPH detections even though the wells they replaced (MKTF-01, MKTF-04, and MKTF-17, respectively) historically had SPH. New wells MKTF-02R and MKTF-18R have not had any SPH detections which is consistent with the wells they replaced (MKTF-02 and MKTF-18). SPH recovery efforts continued during 2021 and are discussed in Section 6.0.



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5.0 Sampling Results

Groundwater quality monitoring was performed in accordance with the 2020 Work Plan (Western LLC 2021b) and the 2021 Analyte List (Western LLC 2022a). A summary of the monitoring events and sample locations is presented in Table 3-1. Some monitoring wells were not sampled due to measurable SPH, insufficient water, or inability to access well. Monitoring program locations that did not contain detectable SPH during fluid level monitoring and had adequate water levels were sampled. The samples were analyzed by Hall Environmental Analysis Laboratory. The analytical data were compared to the cleanup levels, as detailed in Section 3.2.

Specific laboratory analyses performed on samples from each monitoring locations are detailed in the 2020 Work Plan (Western LLC 2021b) and the 2021 Analyte List (Western LLC 2022a). Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total and dissolved metals, and general chemistry analyses were performed (Tables 5-1 through 5-5). Field parameters were also collected prior to sample collection (Table 5-6). 2021 field logs are included in Appendix A, 2021 analytical laboratory reports are included in Appendix C, and Tier II data validation reports are provided in Appendix D.

As discussed in Section 3.3, EDB was added to the analyte list and analyzed via method 8011. These data are included in Table 5-1. Pesticides were added to the analyte list for EP-2 and included in Table 5-2b. PFAS were added to the analyte list for OW-63 and these data are included in Table 5-7.

5.1 Analytical Results

The analytical results are shown in Tables 5-1 through 5-5 and notable findings are described in Section 5.2. The analytical tables include the results from the 2021 monitoring events and the previous three monitoring events. VOCs are presented in Table 5-1, SVOCs are presented in Table 5-2a, and pesticides are presented in Table 5-2b. Total and dissolved metal analytical results are presented in Tables 5-3 and 5-4, respectively. General chemistry analyses are presented in Table 5-5. PFAS analyses are presented in Table 5-7. Analytical results that exceeded the appropriate cleanup levels are noted in Tables 5-1 through 5-5 and 5-7 as bolded values. Non-detected sampling results with reporting limits greater than the appropriate cleanup levels are noted by italics in the tables.

Data provided by analyses where the limit of detection values exceed the cleanup levels are considered data quality exceptions and will not be used to demonstrate compliance. These data quality exceptions are identified by italicized font and presented in Tables 5-1 through 5-5 and 5-7. Furthermore, data quality exceptions are identified in the tables where the data are presented and will continue in all future submittals.

Analytical results for benzene, toluene, ethylbenzene, and total xylenes and methyl tert-butyl ether for individual well groups are presented on Figures 5-1 through 5-9. Results that exceeded the cleanup



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levels are denoted as bolded and highlighted values. Other constituents were detected in the monitoring wells (Tables 5-1 through 5-5 and 5-7) but are not included on the figures.

5.2 Discussion of New Findings

Data collected in 2021 were generally consistent with previous events. No significant new findings were noted with the exceptions presented in the following paragraphs.

Per the Refinery's response to Comment 22 in the "Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019" (Western LLC 2021a), samples were collected and analyzed for EDB during all four quarters. EDB was analyzed by methods 8011 and 8260 during first and second quarters and generally analyzed by 8011 during the third and fourth quarters. Data from both methods are presented in Table 5-1. EDB will be sampled by method 8011 during 2022 (Suzuki 2022).

Per the Refinery's response to Comment 30 in the "Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western LLC 2021a), PFAS were analyzed at well OW-63. PFAS samples were collected during all four quarters; however, the first quarter samples were not collected following approved PFAS sampling protocols. Although the first quarter data are included in the laboratory data appendix, the data are not considered valid. The PFAS data are provided in Table 5-7. PFAS will be sampled during 2022 at well OW-63 (Suzuki 2022).

Per the Refinery's response to Comment 5 in the "Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019 (Western Inc. 2021b), pesticides were sampled at EP-2 during the second quarter. No additional pesticide samples were collected from EP-2 in the subsequent quarters; however, pesticides will be sampled during 2022 at EP-2 (Suzuki 2022).

Per the Refinery's response to Comment 11 of the NMED "Disapproval, 2020 Annual Groundwater Monitoring Report" (Western LLC 2022b), the Refinery agreed to evaluate whether groundwater recovery conducted at wells OW-54 and OW-55 was potentially impacting dissolved-phase constituent concentrations in OW-56. As shown on Figure 4-2, the potentiometric surface is 6,900.38 ft above mean sea level (amsl) in Well OW-54, 6,904.78 ft amsl in OW-55, and 6,905.80 ft amsl in OW-56. In this area of the Refinery, water is flowing from well OW-56 towards wells OW-54 and OW-55, which is consistent for the data collected in 2020 and 2021. Therefore, wells OW-54 and OW-55 are not influencing the dissolved phase constituent concentrations detected in OW-56. These wells will continue to be monitored quarterly.

5.3 QA/QC Analytical Results

Quality assurance/quality control (QA/QC) groundwater samples were collected during the groundwater monitoring and sampling events and were submitted for laboratory analyses. The analytical data reported from the receiving laboratory underwent Tier I and Tier II data validation by Trihydro's chemical data validation services group. Data qualified are presented in their respective tables, as listed



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in previous sections, where relevant. The Tier II data validation reports are provided in Appendix D. A summary of qualifiers and QA/QC sample results are discussed in the sections below.

The following qualifiers were applied to the analytical data collected during 2021:

- J – estimated concentration
- J+ – estimated concentration, biased high
- J- – estimated concentration, biased low
- UJ – estimated reporting limit
- U – evaluated to be undetected at the reporting limit
- JB – estimated concentration due to blank contamination
- R – rejected, data not usable

5.3.1 Rejected Data

Out of the 2021 data packages, 99.5 percent of the data received from the laboratory were acceptable with approximately 0.5 percent of the data rejected during the 2021 monitoring events. Rejected data were observed during all four quarters. These data were qualified based on holding time exceedances, laboratory control sample/laboratory control sample duplicate percent recoveries, matrix spike/matrix spike duplicate recoveries or surrogate recoveries. Rejected data are presented in their respective tables and explanations of the qualifiers can be found in the data validation reports provided in the following Appendices:

- Appendix D-1 – Reports 2103532, 2103142, and 2103470
- Appendix D-2 – Reports 2106B77, 2106D55, 2106B14, 2106976, 2106895, and 2106646
- Appendix D-3 – Reports 2109709, 2109D30, and 2109C62
- Appendix D-4 – Reports 2112902, 2112658, 2112634, 2112997, and 2112B70

5.3.2 Field Blanks

Thirty-seven field blank samples were collected during 2021. The field blanks were collected daily by adding distilled water to sample bottles in the field. Acetone, 2-butanone, and toluene were detected in field blanks collected during the first and third quarters. Target analytes detected in the associated samples at concentrations less than the reporting limit were qualified as U. Detections that were greater than the blank detection but less than 10 times the blank concentration were qualified as J.



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5.3.3 Trip Blanks

Thirty-three trip blank samples were collected during 2021. Trip blanks are provided by the laboratory and are kept with the sample coolers during shipment to and from the laboratory. Benzene was detected during the first quarter sampling event on March 2, 2021. Target analytes detected in the associated samples at concentrations less than the reporting limit were qualified as U. Detections that were greater than the blank detection but less than 10 times the blank concentration were qualified as JB. Non-detections of the target analytes in the associated samples and results greater than 10 times the blank detection did not require qualification.

5.3.4 Equipment Blanks

Thirty-three equipment blank samples were collected during 2021. Equipment blanks were collected by cleaning reusable equipment and then collecting a sample from the equipment using distilled water. Thirty-five analytes were detected in the equipment blanks. Target analytes detected in the associated samples at concentrations less than the reporting limit were qualified as U. Detections that were greater than the blank detection but less than 10 times the blank concentration were qualified as JB. Non-detections of the target analytes in the associated samples and results greater than 10 times the blank detection did not require qualification.

5.3.5 Field Duplicates

Duplicate samples were collected during all sample events of 2021. Forty duplicate samples were collected during the sampling events. The analytical results for the duplicate samples are included with their parent samples in previous tables. Relative percent difference (RPD) values were calculated and compared to the data validation quality control limit of 30 percent. RPD values greater than 30 percent were qualified as J due to evidence of poor precision. RPD values that exceeded 100 percent were assigned J qualifiers if detected in the associated samples and UJ qualifiers if not detected due to evidence of moderately poor precision.



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6.0 Remediation Activities

Fluid recovery at the Refinery is reported quarterly in the Hydrocarbon Interim Measures Seep Reports. Remediation activities include vacuum truck recovery in the standpipe and retention ditch, borrow pit sumps, and wells.

Recovery data for 2021 is presented in Tables 6-1 (standpipe and retention ditch recovery), 6-2 (sump recovery), and 6-3 (well recovery). These activities will continue to be reported to NMED on a quarterly basis in the Hydrocarbon Interim Measures Seep Reports.



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7.0 Conclusions

Based on the 2021 groundwater gauging and analytical results, the following conclusions are presented:

- The groundwater monitoring wells screened in the Alluvial/Fluvial upper sand aquifer were consistently dry in 2021. BW-2A had water detected during the third quarter of 2021. The fluid levels in the groundwater monitoring wells screened in the Chinle/Alluvium aquifer and Sonsela aquifer remained generally consistent with previous events.
- The presence and distribution of SPH in 2021 is generally consistent with, or slightly lower than historical monitoring data except for wells MKTF-39, MKTF-48, MKTF-50, GWM-1, OW-61, OW-65, RW-1, and RW-6 where SPH thickness increased slightly when compared to historical values.
- Based on the potentiometric surface map for the Chinle/Alluvium aquifer, water is flowing from well OW-56 towards wells OW-54 and OW-55, which is consistent for the data collected in 2020 and 2021. Therefore, wells OW-54 and OW-55 are not influencing the dissolved phase constituent concentrations detected in OW-56. These wells will continue to be monitored quarterly.
- Recovery activities will continue to take place and will be summarized in the Hydrocarbon Interim Measures Seep Reports, submitted quarterly to NMED.

Gauging and sampling requirements will continue in accordance with the most current NMED-approved Facility-Wide Groundwater Monitoring Work Plan. The 2022 Annual Groundwater Monitoring Report will be submitted no later than March 31, 2023. Site assessments will take place as required and NMED will be notified of remediation activities.



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8.0 References

Environmental Protection Agency (EPA). 2021. Regional Screening Levels, Hazardous Quotient 1.0. November.

EPA. 2022. National Primary Drinking Water Regulations. Available at: <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>.

New Mexico Environment Department (NMED). 2017. Final RCRA Post-Closure Permit, Western Refining Southwest, Inc., Gallup Refinery, EPA ID NM No. NM000333211. September.

NMED. 2021. Risk Assessment Guidance for Investigations and Remediation, Tables A-1 and 6-4. November.

NMED. 2022. Approval with Modifications, Response to Second Disapproval Facility Wide Groundwater Monitoring Work Plan – Updates for 2021, Western Refining Southwest Inc., Gallup Refinery, McKinley County, Gallup, New Mexico, EPA ID # NMD000333211, HWB-WRG-21-006. February 28.

Suzuki, M. 2022. Marathon Gallup Refinery – 2022 Groundwater Analyte List Approval. February 25 [Online]. Available email: Michiya.Suzuki@state.nm.us.

Western Refining Southwest, Inc. (Western Inc.). 2021a. Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019, Western Refining Southwest, Inc., Marathon Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-13. July 31.

Western Inc. 2021b. Response to Approval with Modifications, Annual Groundwater Monitoring Report Gallup Refinery – 2019, Western Refining Southwest, Inc., Marathon Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-13. December 17.

Western Inc. 2022. Approval with Modifications, [Revised] Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report, Western Refining Southwest, Inc., Marathon Gallup Refinery, EPA ID #NM000333211, HWB-WRG-21-007. March 3.



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Western Refining Southwest LLC (Western LLC). 2021a. Response to Disapproval, Annual Groundwater Monitoring Report Gallup Refinery – 2019, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-13. March 31.

Western LLC. 2021b. Approval with Modifications, Disapproval Facility Wide Ground Water Monitoring Work Plan – Updates for 2020, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-012. March 25.

Western LLC. 2021c. Tank 570 Release and Additional Areas Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery, EPA ID# NMD000333211. November 1.

Western LLC. 2021d. Marketing Tank Farm Laser-Induced Fluorescence/Hydraulic Profiling Investigation Report Addendum, Western Refining Southwest LLC, D/B/A/ Marathon Gallup Refinery, EPA ID# NMD000333211. November 19.

Western LLC. 2022a. Response to Second Disapproval, Facility Wide Ground Water Monitoring Work Plan – Updates for 2021, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery EPA ID# NMD000333211/HWB-WRG-21-006. January 31.

Western LLC. 2022b. Response to Disapproval, 2020 Annual Groundwater Monitoring Report, Western Refining Southwest LLC (DBA Marathon Gallup Refinery), EPA ID# NMD000333211, HWB-WRG-21-012. March 11.



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Figures

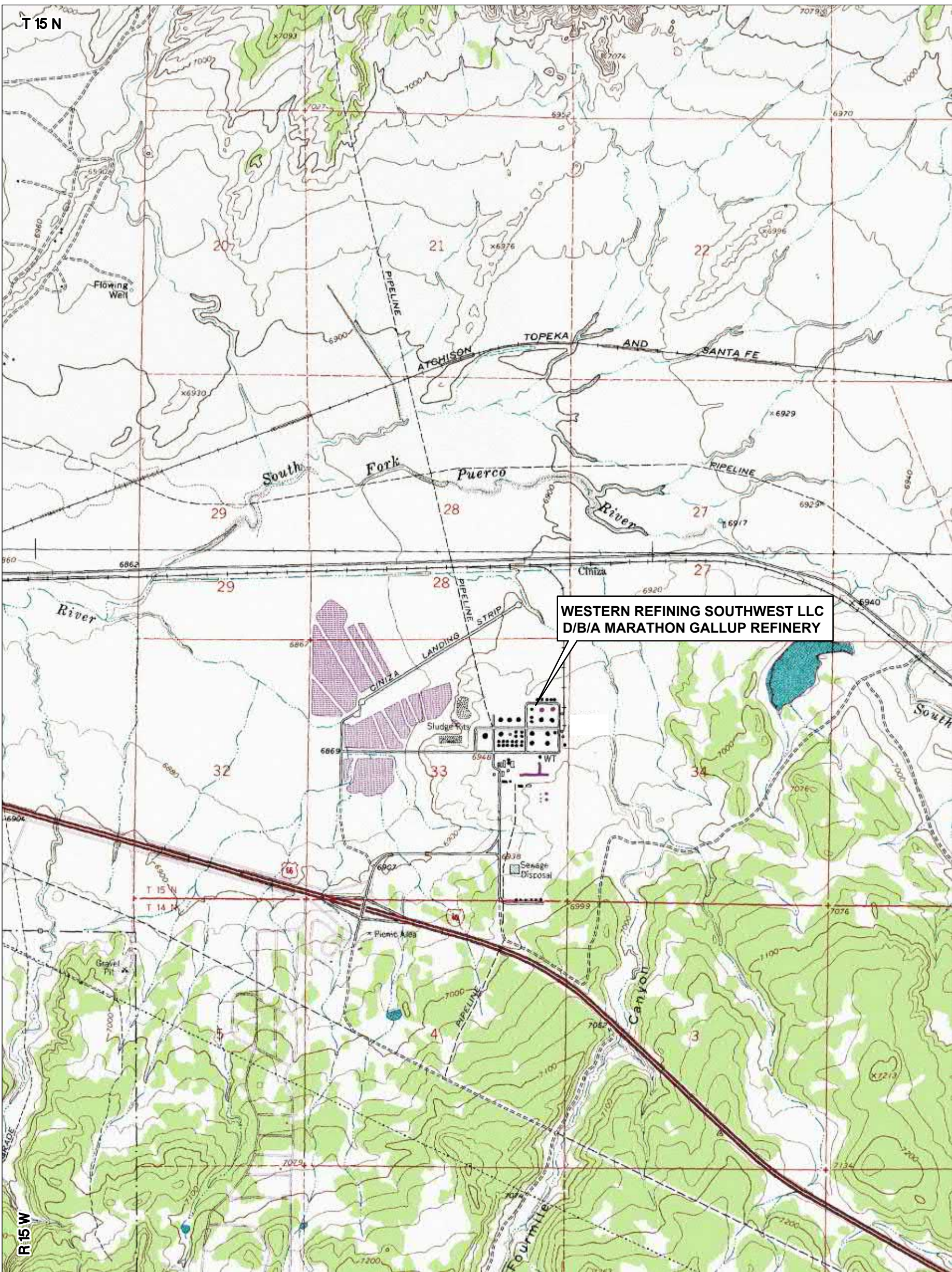
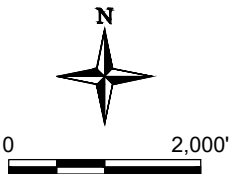


Image Cite: U.S. Geological Survey, 1:24,000—Scale 7.5 Minute Digital Raster Graphic Quadrangle, McKinley County, Publication: 2004

NOTE:
SITE LEGAL DESCRIPTION - TOWNSHIP 15 NORTH,
RANGE 15 WEST, SECTION 33, LOWER QUARTER
SECTION 28, AND NORTHEAST QUARTER SECTION 4.





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FIGURE 1-1			
SITE LOCATION AND TOPOGRAPHIC MAP			
WESTERN REFINING SOUTHWEST LLC D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO			
Drawn By: REP	Checked By: BN	Scale: 1" = 2,000'	Date: 2/3/2022
		File: 697-AR-TOPOMAP-2021	

\\TRIHYDRO.COM\CLIENTS\TOW\MARATHON\GALLUP\REPORTS\GOW\ANNUALREPORTS\2021\ANNUALREPORT_2021\097-AR-FACWELLGROUPS-2021

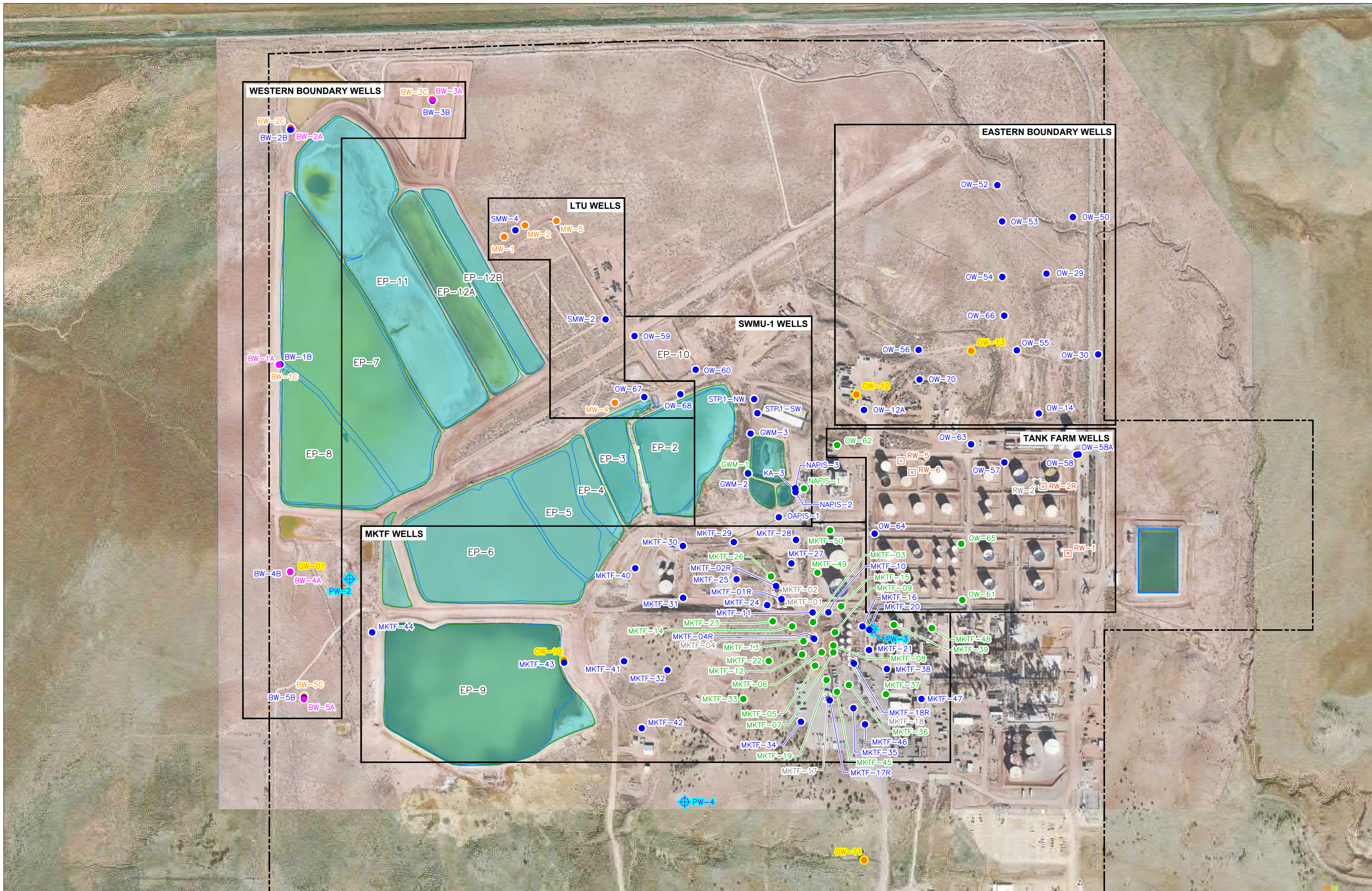


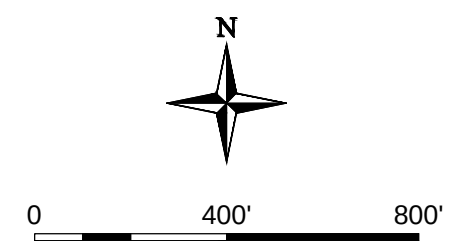
Image Cite: USDA/FSA - Aerial Photography Field Office, NAD MeSD - Publication: 2014

EXPLANATION

● BW-5A	ALLUVIAL/FLUVIAL UPPER SAND AQUIFER MONITORING WELL AND DESIGNATION	 PRODUCTION WELL GROUP
● BW-5B	CHINLE/ALLUVIUM AQUIFER MONITORING WELL AND DESIGNATION	 WELL GROUP
● MKTF-14	SPH MONITORING WELL AND DESIGNATION	 SURFACE WATER
● BW-5C	SONSELA AQUIFER MONITORING WELL AND DESIGNATION	EP
⊕ PW-4	RAW WATER PRODUCTION WELL AND DESIGNATION	EVAPORATION POND
RW-6	RECOVERY WELL AND DESIGNATION	LTU
MKTF-17	MONITORING WELL AND DESIGNATION - PLUGGED AND ABANDONED	SPH
RW-2	RECOVERY WELL AND DESIGNATION - PLUGGED AND ABANDONED	STP
	PROPERTY BOUNDARY (APPROXIMATE)	SWMU
	DEEP WELL GROUP	WWT
		WASTE WATER TREATMENT

NOTES:

- LDU-EAST, LDU-WEST, OIL SUMP LDU, AND STP-1 TO EP-2 ARE SURFACE WATER SAMPLE LOCATIONS.
- WELLS RW-2, MKTF-01, MKTF-02, MKTF-04, MKTF-17, AND MKTF-18 WERE PLUGGED AND ABANDONED DURING THIRD QUARTER 2021.



 Trihydro CORPORATION 1252 Commerce Drive Laramie, Wyoming 82070 www.trihydro.com (P) 307/745.7474 (F) 307/745.7729	FIGURE 3-1			
	FACILITY AND WELL GROUPS 2021			
	WESTERN REFINING SOUTHWEST LLC D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO			
Drawn By: REP	Checked By: BN	Scale: 1" = 400'	Date: 2/3/2022	File: 697-AR-FACWELLGROUPS-2021



Image Cite: DigitalGlobe CNES (2022) Distribution Airbus DS Microsoft Corporation, BING Imagery

EXPLANATION

● BW-5A
DRY

MONITORING WELL AND DESIGNATION
(SHOWING GROUNDWATER ELEVATION
IN FEET ABOVE MEAN SEA LEVEL)

NOTE:

POTENTIOMETRIC SURFACE GENERATED USING
3RD QUARTER ANNUAL MONITORING EVENT DATA.



0 400'

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FIGURE 4-1

**ALLUVIAL / FLUVIAL UPPER SAND AQUIFER
POTENTIOMETRIC SURFACE MAP (2021)**

**WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO**

Drawn By: REP Checked By: BN Scale: 1" = 400' Date: 2/10/2022 File: 697-AR-PS-ALLUVIAL-202109

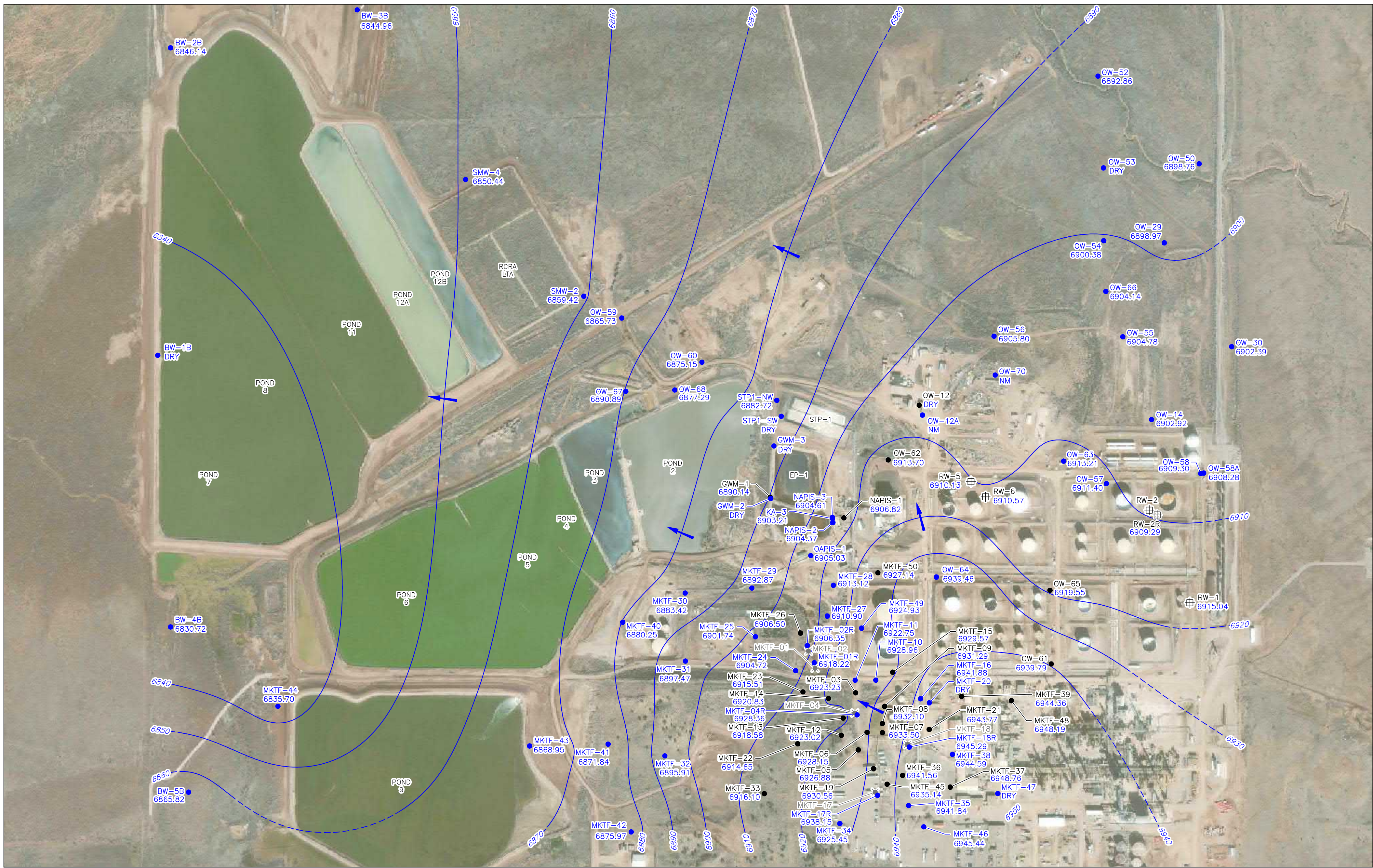


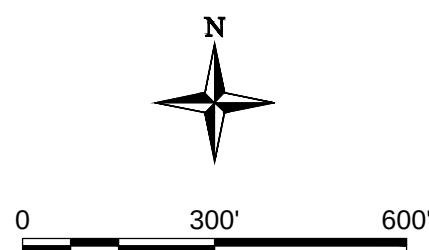
Image Cite: DigitalGlobe CNES (2022) Distribution Airbus DS Microsoft Corporation, BING Imagery

EXPLANATION

- BW-5B 6865.82 CHINLE / ALLUVIUM AQUIFER WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL)
- 6860 — LINE OF EQUAL ELEVATION OF POTENTIOMETRIC SURFACE (FEET ABOVE MEAN SEA LEVEL, DASHED WHERE INFERRED)
- ← ESTIMATED GROUNDWATER FLOW DIRECTION
- MKTF-06 SPH MONITORING WELL AND DESIGNATION
- ⊕ RW-1 RECOVERY WELL
- ⊗ MKTF-17 MONITORING WELL AND DESIGNATION - PLUGGED AND ABANDONED
- NM NOT MEASURED
- SPH SEPARATE-PHASE HYDROCARBON

NOTES:

- POTENTIOMETRIC SURFACE GENERATED USING 3RD QUARTER ANNUAL MONITORING EVENT DATA.
- DATA FROM WELL OW-67 APPEARS TO BE ANOMALOUS AND WAS NOT USED IN THE CONTOUR GENERATION FOR THIS REPORTING PERIOD.
- WELLS MKTF-01, MKTF-02, MKTF-04, MKTF-17, AND MKTF-18 WERE PLUGGED AND ABANDONED DURING THIRD QUARTER 2021, REPLACEMENT WELLS SHOWN IN CONTOURING.



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FIGURE 4-2

CHINLE/ALLUVIUM AQUIFER POTENTIOMETRIC SURFACE MAP (2021)

**WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO**

Drawn By: REP	Checked By: BN	Scale: 1" = 200'	Date: 2/10/2022	File: 697-AR-PS-CHINLE-202109
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Image Cite: DigitalGlobe CNES (2022) Distribution Airbus DS Microsoft Corporation, BING Imagery

EXPLANATION

- BW-5C
6871.69
SONSELA AQUIFER MONITORING WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FT AMSL)
- 6875 --
LINE OF EQUAL ELEVATION OF POTENTIOMETRIC SURFACE (FEET ABOVE MEAN SEA LEVEL, DASHED WHERE INFERRED)
- ←
ESTIMATED GROUNDWATER FLOW DIRECTION
- PW-4
NM
RAW WATER PRODUCTION WELL AND DESIGNATION
- NM
NOT MEASURED

NOTES:

- POTENTIOMETRIC SURFACE GENERATED USING 3RD QUARTER ANNUAL MONITORING EVENT.
- OW-01 AND OW-10 NOT INCLUDED IN CONTOUR DUE TO ARTESIAN CONDITIONS PRESENT.

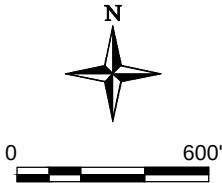


FIGURE 4-3

SONSELA AQUIFER POTENTIOMETRIC SURFACE MAP (2021)

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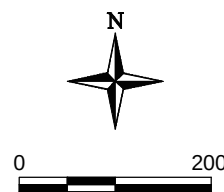
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Image Cite: USDA/FSA - Aerial Photography Field Office, NAIP MRSID - Publication: 2014

EXPLANATION

- MKTf-33
6.57
 - RW-6
3.10
 - OW-10
 - MKTf-09
SPH
- SPH MONITORING WELL AND DESIGNATION
(SHOWING SPH THICKNESS IN FEET)
- RECOVERY WELL AND DESIGNATION
(SHOWING SPH THICKNESS IN FEET)
- SONSELLA AQUIFER MONITORING WELL AND DESIGNATION
- CHINLE/ALLUVIUM AQUIFER MONITORING WELL AND DESIGNATION
- SEPARATE-PHASE HYDROCARBON



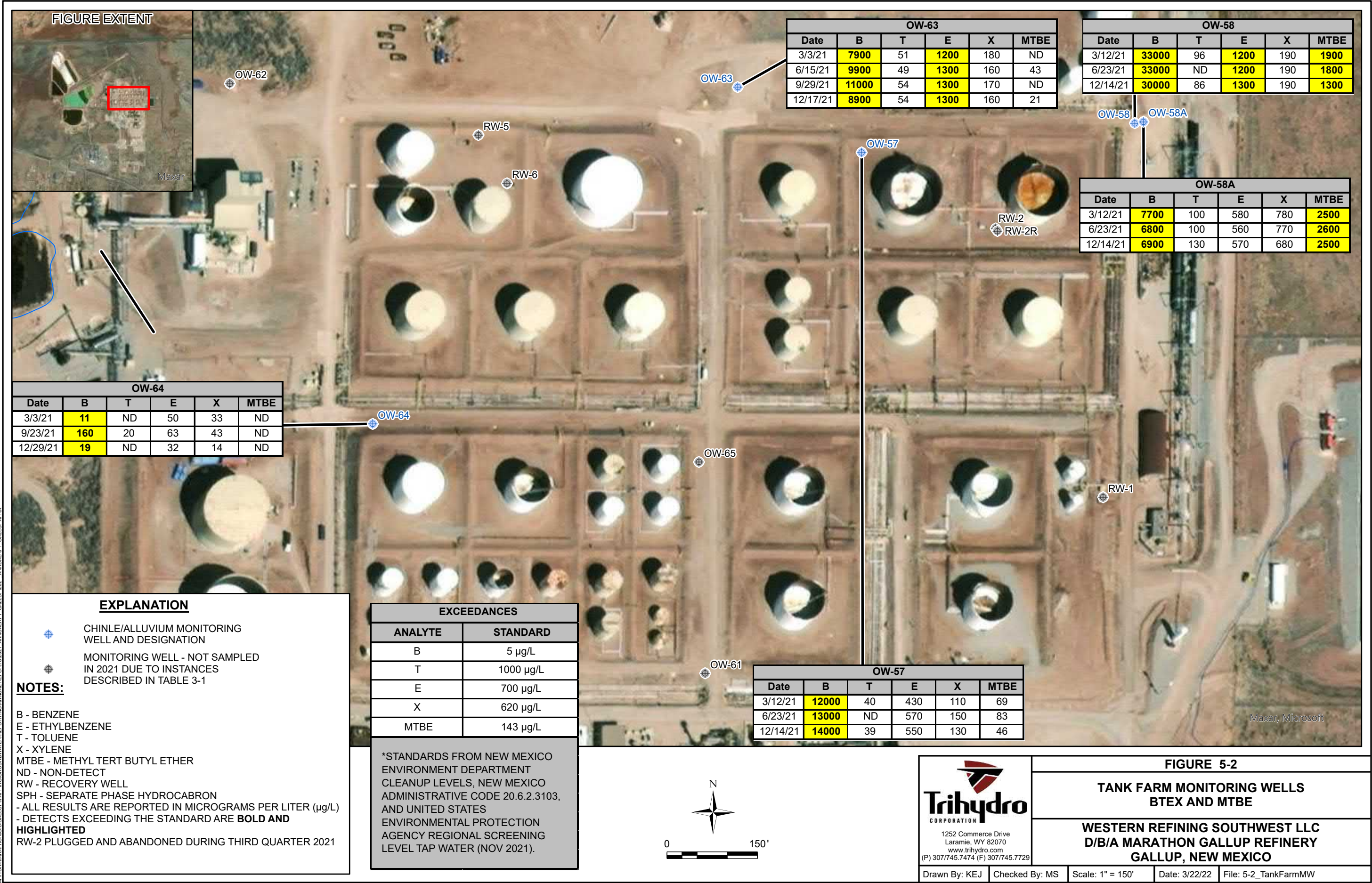
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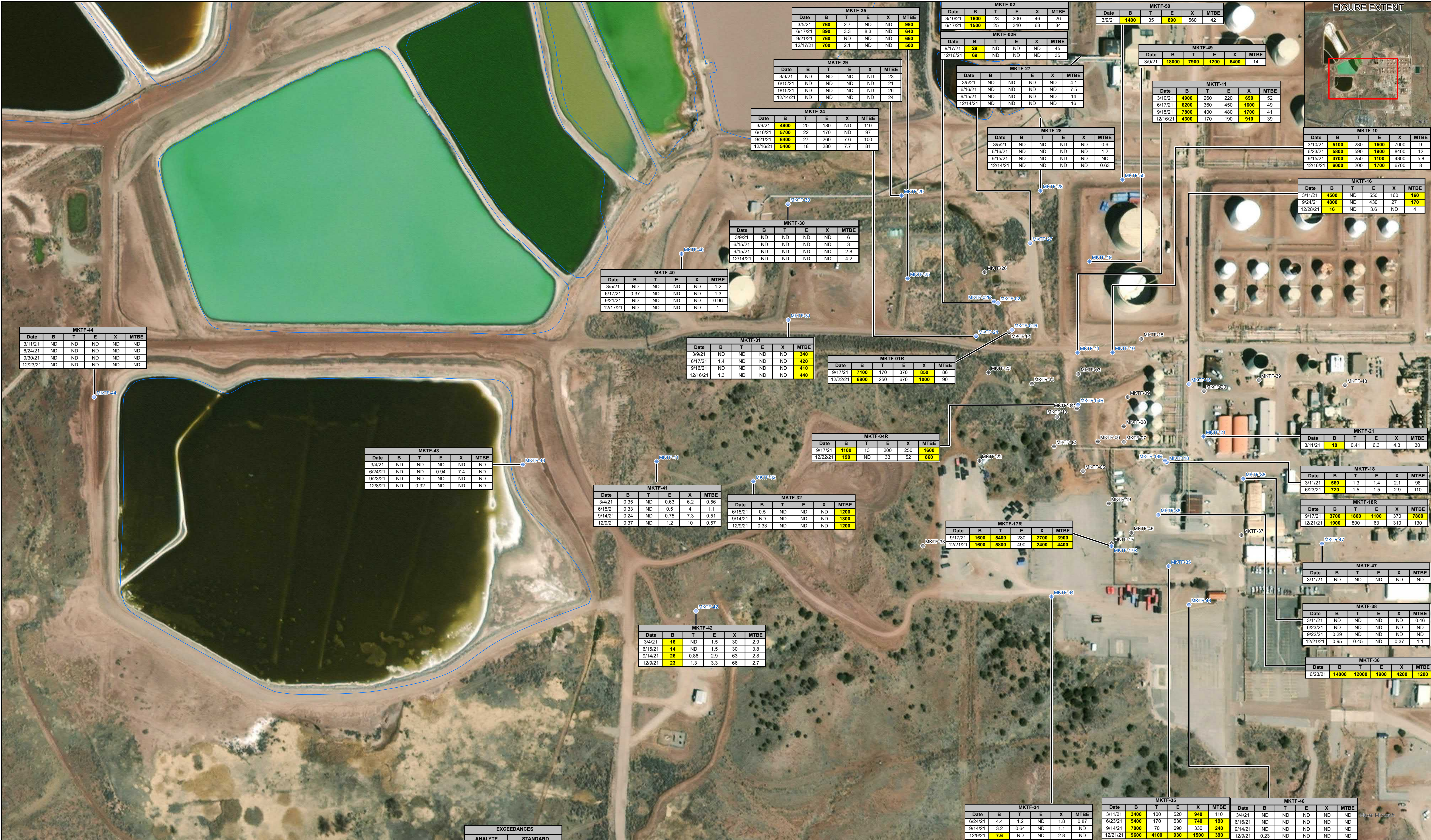
FIGURE 4-4

SPH THICKNESS MAP
3RD QUARTER 2021

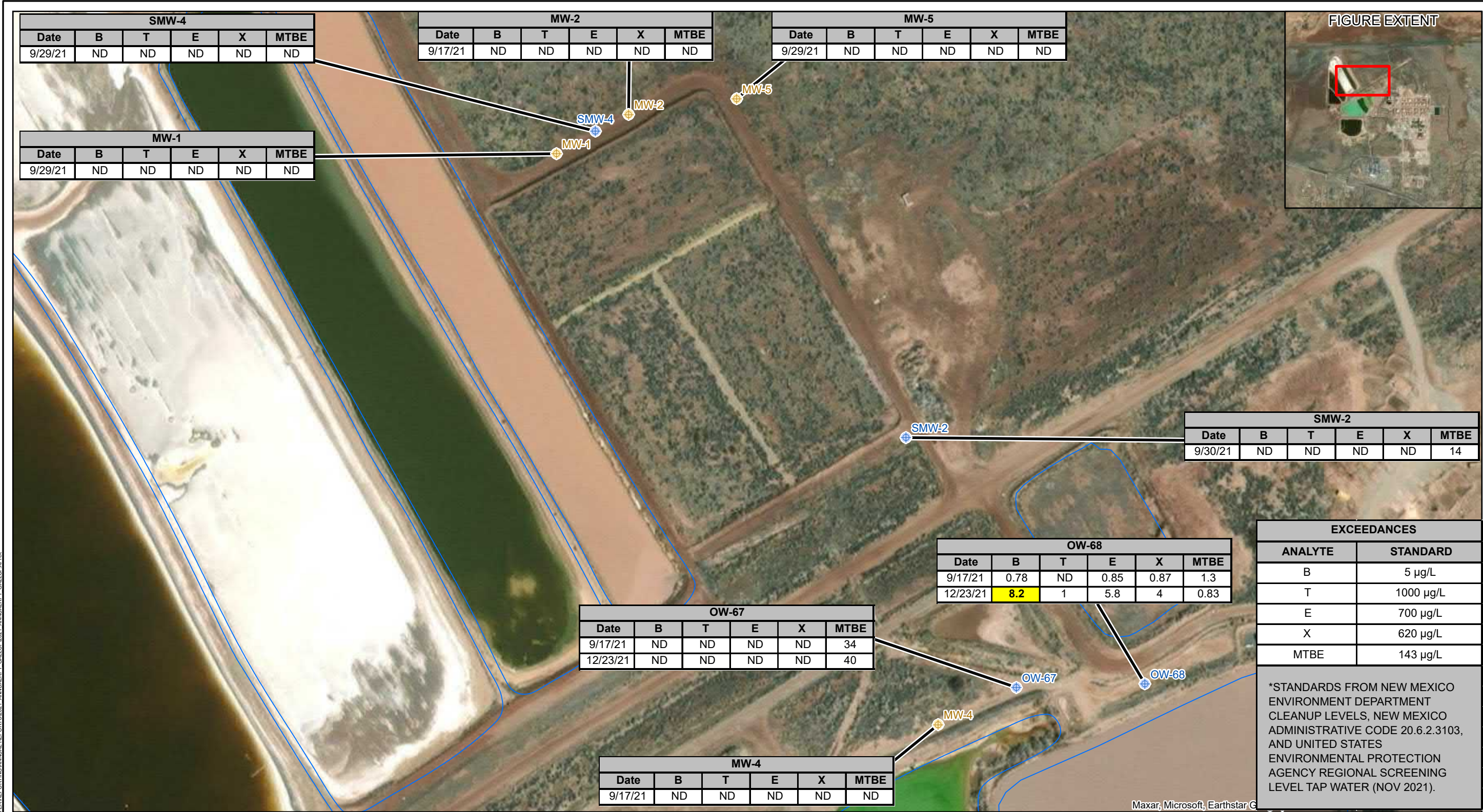
WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO











EXPLANATION

- SONSELA MONITORING WELL AND DESIGNATION
- CHINLE/ALLUVIUM MONITORING WELL AND DESIGNATION

NOTES:

B - BENZENE
E - ETHYLBENZENE
T - TOLUENE
X - XYLENE
MTBE - METHYL TERT BUTYL ETHER
ND - NON-DETECT

LTU - LAND TREATMENT UNIT
- ALL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L)
- DETECTS EXCEEDING THE STANDARD ARE **BOLD AND HIGHLIGHTED**

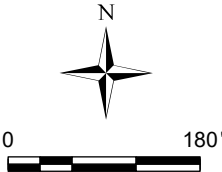
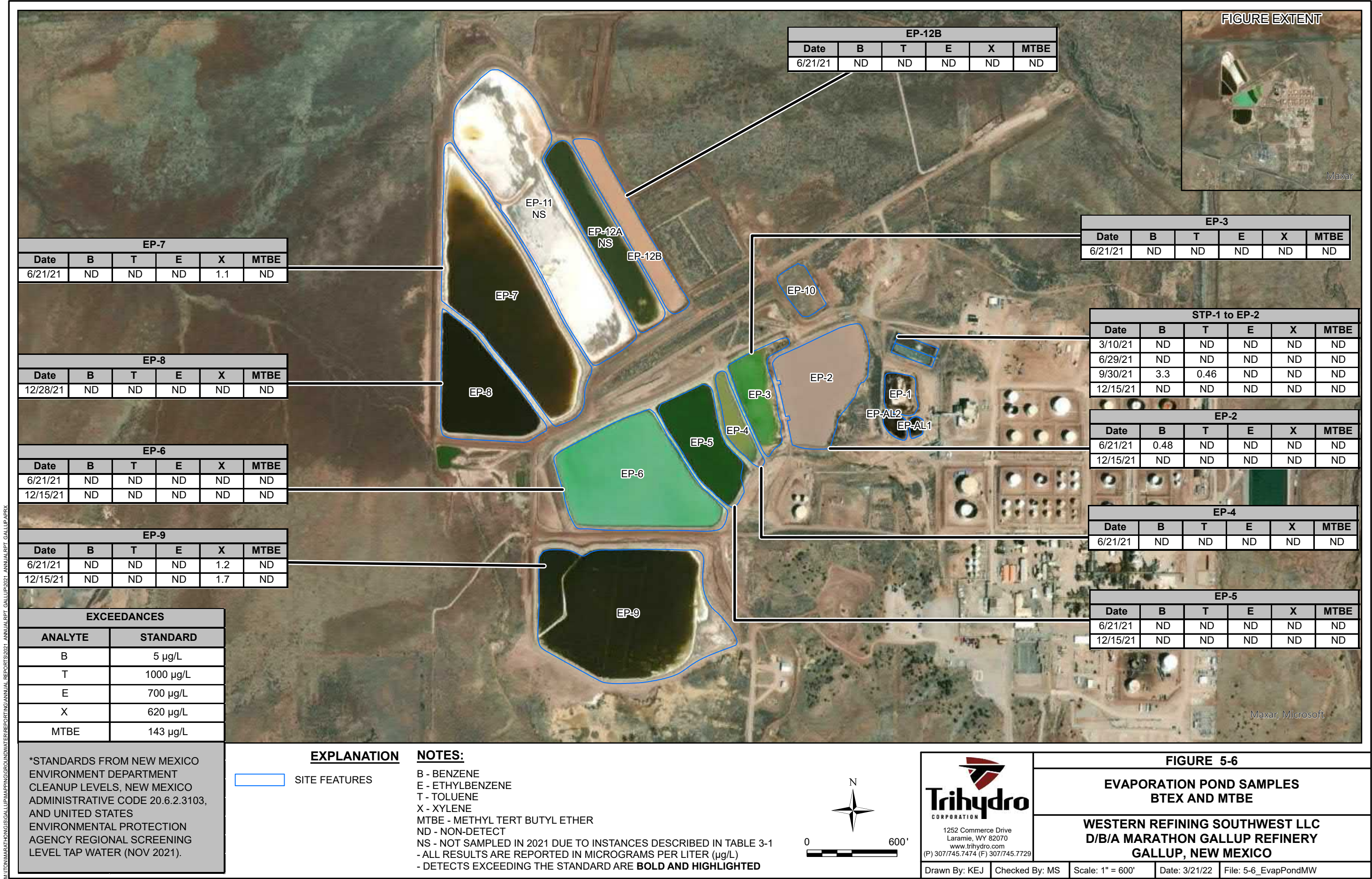


FIGURE 5-5

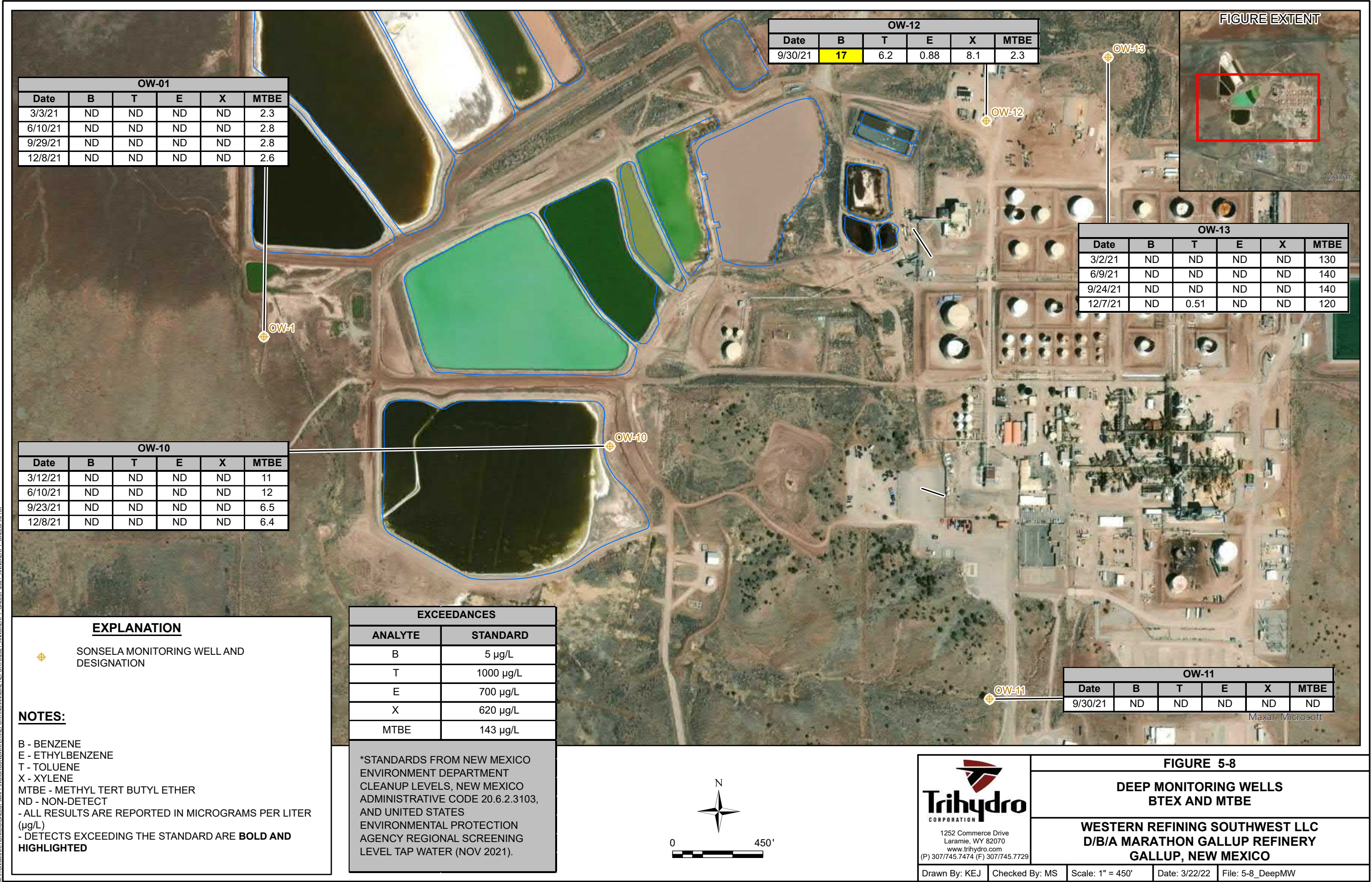
LTU MONITORING WELLS
BTEX AND MTBE

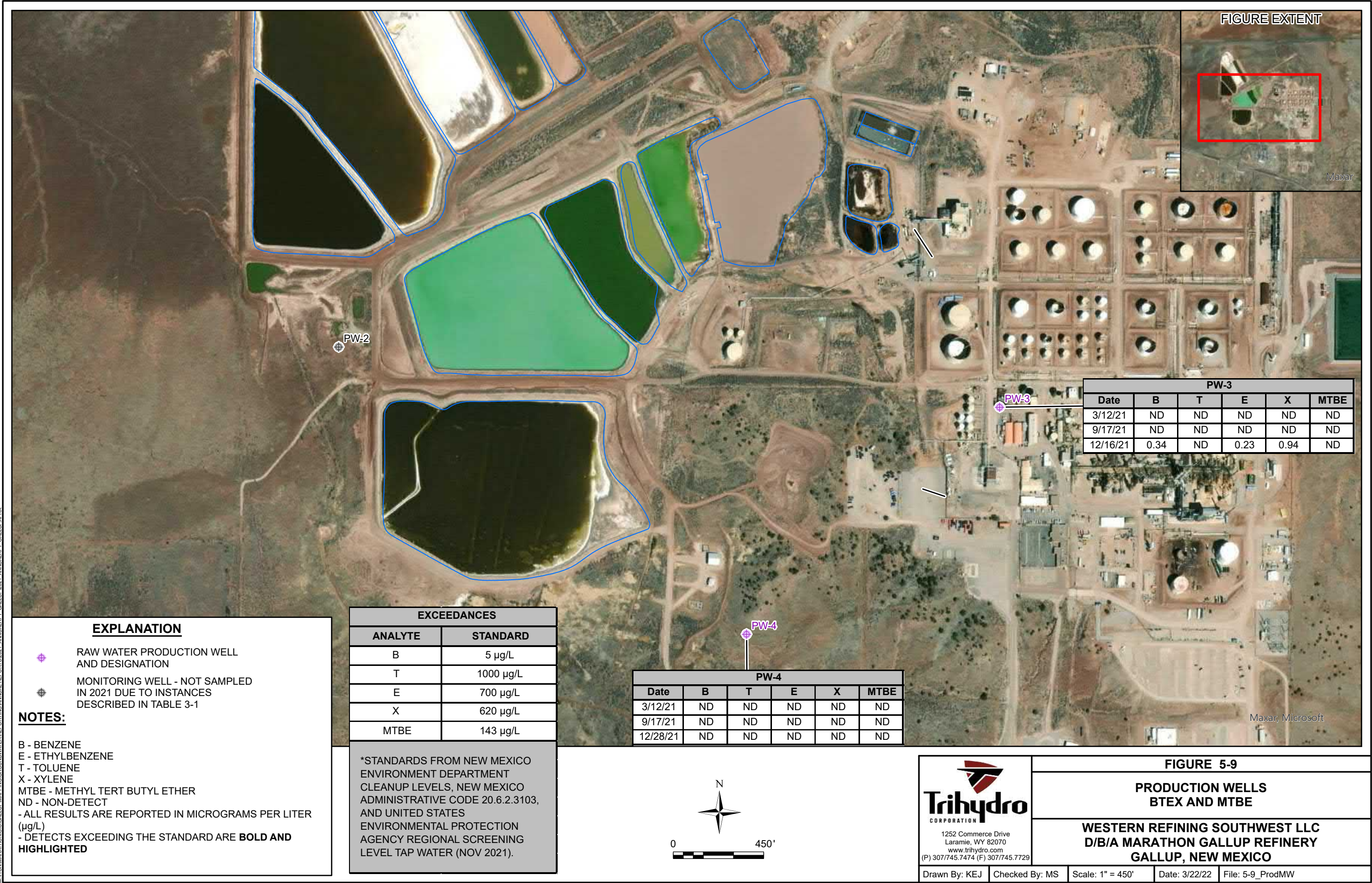
WESTERN REFINING SOUTHWEST LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: KEJ | Checked By: MS | Scale: 1" = 180' | Date: 3/21/22 | File: 5-5_LTUMW











Western Refining Southwest LLC
D/B/A Marathon Gallup Refinery
2021 Annual Groundwater Monitoring Report

Tables

TABLE 3-1. GROUNDWATER MONITORING PROGRAM 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO

Group	Monitoring Well	Sampling Frequency	1Q2021	2Q2021	3Q2021	4Q2021
Deep Monitoring Wells	OW-01	Quarterly	3/3/2021	6/10/2021	9/29/2021	12/8/2021
	OW-10	Quarterly	3/12/2021	6/10/2021	9/23/2021	12/8/2021
	OW-11	Annually	NA	NA	9/30/2021	NA
	OW-12	Annually	NA	NA	9/30/2021	NA
	OW-13	Quarterly	3/2/2021	6/9/2021	9/24/2021	12/7/2021
Eastern Boundary Wells	OW-12A*	Quarterly	NA	NA	NS – Dry	12/22/2021
	OW-14	Quarterly	NS – RW	NS – RW	9/24/2021	12/30/2021
	OW-29	Quarterly	3/2/2021	6/9/2021	9/24/2021	12/7/2021
	OW-30	Quarterly	NS – RW	NS – RW	9/24/2021	12/30/2021
	OW-50	Quarterly	3/2/2021	6/9/2021	9/24/2021	12/7/2021
	OW-52	Quarterly	3/2/2021	6/9/2021	9/24/2021	12/7/2021
	OW-53	Quarterly	NS – Dry	NS – Dry	NS – Dry	NS – Dry
	OW-54	Quarterly	NS – RW	NS – RW	9/24/2021	12/29/2021
	OW-55	Quarterly	NS – RW	NS – RW	9/24/2021	12/29/2021
	OW-56	Quarterly	3/10/2021	6/22/2021	9/24/2021	12/23/2021
Evaporation Ponds	OW-66*	Quarterly	NA	NA	9/17/2021	12/7/2021
	OW-70*	Quarterly	NA	NA	9/17/2021	12/22/2021
	EP-2	Semiannually	NA	6/21/2021	NA	12/14/2021
	EP-3	Semiannually	NA	6/21/2021	NA	NS – UTA
	EP-4	Semiannually	NA	6/21/2021	NA	NS – UTA
	EP-5	Semiannually	NA	6/21/2021	NA	12/15/2021
	EP-6	Semiannually	NA	6/21/2021	NA	12/15/2021
	EP-7	Semiannually	NA	6/21/2021	NA	NS – UTA
	EP-8	Semiannually	NA	NS – UTA	NA	12/28/2021
	EP-9	Semiannually	NA	6/21/2021	NA	12/15/2021
	EP-11	Semiannually	NA	NS – Dry	NA	NS – UTA
	EP-12A	Semiannually	NA	NS – Dry	NA	NS – Dry
	EP-12B	Semiannually	NA	6/21/2021	NA	NS – Dry
	STP-1 to EP-2	Quarterly	3/10/2021	6/29/2021	9/30/2021	12/15/2021
Land Treatment Unit Wells	MW-1	Annually	NA	NA	9/29/2021	NA
	MW-2	Annually	NA	NA	9/17/2021	NA
	MW-4	Annually	NA	NA	9/17/2021	NA
	MW-5	Annually	NA	NA	9/29/2021	NA
	SMW-2	Annually	NA	NA	9/30/2021	NA
	SMW-4	Annually	NA	NA	9/29/2021	NA
	OW-67*	Annually	NA	NA	9/17/2021	12/23/2021
	OW-68*	Annually	NA	NA	9/17/2021	12/23/2021

TABLE 3-1. GROUNDWATER MONITORING PROGRAM 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO

Group	Monitoring Well	Sampling Frequency	1Q2021	2Q2021	3Q2021	4Q2021
Marketing Tank Farm Wells	MKTF-01	Quarterly	NS – SPH	NS – SPH	P&A	P&A
	MKTF-01R*	Quarterly	NA	NA	9/17/2021	12/22/2021
	MKTF-02	Quarterly	3/10/2021	6/17/2021	P&A	P&A
	MKTF-02R*	Quarterly	NA	NA	9/17/2021	12/15/2021
	MKTF-03	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-04	Quarterly	NS – SPH	NS – SPH	P&A	P&A
	MKTF-04R*	Quarterly	NA	NA	9/17/2021	12/22/2021
	MKTF-05	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-06	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-07	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-08	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-09	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-10	Quarterly	3/10/2021	6/23/2021	9/15/2021	12/16/2021
	MKTF-11	Quarterly	3/10/2021	6/17/2021	9/15/2021	12/16/2021
	MKTF-12	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-13	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-14	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-15	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-16	Quarterly	3/11/2021	NS – Dry	9/24/2021	12/28/2021
	MKTF-17	Quarterly	NS – SPH	NS – SPH	P&A	P&A
	MKTF-17R*	Quarterly	NA	NA	9/17/2021	12/21/2021
	MKTF-18	Quarterly	3/11/2021	6/23/2021	P&A	P&A
	MKTF-18R*	Quarterly	NA	NA	9/17/2021	12/21/2021
	MKTF-19	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-20	Quarterly	NS – Dry	NS – SPH	NS – Dry	NS – Dry
	MKTF-21	Quarterly	3/11/2021	NS – Dry	NS – Dry	NS – Dry
	MKTF-22	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-23	Quarterly	NS – SPH	NS – Dry	NS – SPH	NS – SPH
	MKTF-24	Quarterly	3/7/2021	6/16/2021	9/22/2021	12/16/2021
	MKTF-25	Quarterly	3/5/2021	6/17/2021	9/21/2021	12/17/2021
	MKTF-26	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-27	Quarterly	3/5/2021	6/16/2021	9/15/2021	12/14/2021
	MKTF-28	Quarterly	3/5/2021	6/16/2021	9/15/2021	12/14/2021
	MKTF-29	Quarterly	3/9/2021	6/15/2021	9/15/2021	12/14/2021
	MKTF-30	Quarterly	3/8/2021	6/15/2021	9/15/2021	12/14/2021
	MKTF-31	Quarterly	3/5/2021	6/17/2021	9/16/2021	12/16/2021
	MKTF-32	Quarterly	NS – SPH	6/15/2021	9/14/2021	12/9/2021
	MKTF-33	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-34	Quarterly	NS – SPH	6/24/2021	9/14/2021	12/9/2021
	MKTF-35	Quarterly	3/11/2021	6/23/2021	9/14/2021	12/21/2021
	MKTF-36	Quarterly	NS – SPH	6/23/2021	NS – SPH	NS – SPH
	MKTF-37	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-38	Quarterly	3/11/2021	6/23/2021	9/22/2021	12/21/2021
	MKTF-39	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-40	Quarterly	3/5/2021	6/17/2021	9/21/2021	12/17/2021
	MKTF-41	Quarterly	3/4/2021	6/15/2021	9/14/2021	12/9/2021
	MKTF-42	Quarterly	3/4/2021	6/15/2021	9/14/2021	12/9/2021
	MKTF-43	Quarterly	3/4/2021	6/24/2021	9/23/2021	12/8/2021
	MKTF-44	Quarterly	3/11/2021	6/24/2021	9/30/2021	12/23/2021
	MKTF-45	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-46	Quarterly	3/4/2021	6/16/2021	9/14/2021	12/9/2021
	MKTF-47	Quarterly	3/11/2021	NS – Dry	NS – Dry	NS – SPH
	MKTF-48	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	MKTF-49	Quarterly	3/9/2021	NS – SPH	NS – SPH	NS – SPH
	MKTF-50	Quarterly	3/9/2021	NS – SPH	NS – SPH	NS – SPH

TABLE 3-1. GROUNDWATER MONITORING PROGRAM 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO

Group	Monitoring Well	Sampling Frequency	1Q2021	2Q2021	3Q2021	4Q2021
Production Wells	PW-2**	Every 3 Years	NA	NA	NA	NA
	PW-3	Quarterly	3/12/2021	6/29/2021	9/17/2021	12/16/2021
	PW-4	Annually	3/12/2021	6/29/2021	9/17/2021	12/28/2021
Solid Waste Management Unit 1 Wells	GWM-1	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	GWM-2	Quarterly	NS – Dry	NS – Dry	NS – Dry	NS – Dry
	GWM-3	Quarterly	NS – Dry	NS – Dry	NS – Dry	NS – Dry
	OW-59	Quarterly	3/12/2021	6/24/2021	9/22/2021	12/23/2021
	OW-60	Quarterly	3/2/2021	6/9/2021	9/30/2021	12/7/2021
	NAPIS-1	Quarterly	NS – SPH	6/23/2021	NS – SPH	NS – SPH
	NAPIS-2	Quarterly	3/9/2021	6/22/2021	9/21/2021	12/14/2021
	NAPIS-3	Quarterly	3/9/2021	6/22/2021	9/21/2021	12/14/2021
	KA-3	Quarterly	3/9/2021	6/22/2021	9/21/2021	12/14/2021
	OAPIS-1	Quarterly	3/9/2021	6/22/2021	9/21/2021	12/14/2021
	STP1-NW	Quarterly	3/9/2021	6/22/2021	9/22/2021	12/14/2021
	STP1-SW	Quarterly	NS – SPH	NS – Dry	NS – Dry	NS – Dry
	LDU-East	Quarterly	3/10/2021	6/22/2021	9/23/2021	12/17/2021
	LDU-West	Quarterly	3/10/2021	6/22/2021	9/23/2021	12/17/2021
	Oil Sump LDU	Quarterly	NS – Dry	NS – Dry	NS – Dry	NS – Dry
Tank Farm Wells	OW-57	Quarterly	3/12/2021	6/23/2021	9/16/2021	12/14/2021
	OW-58	Quarterly	3/12/2021	6/23/2021	9/16/2021	12/14/2021
	OW-58A	Quarterly	3/12/2021	6/23/2021	9/16/2021	12/14/2021
	OW-61	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	OW-62	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	OW-63	Quarterly	3/3/2021	6/15/2021	9/29/2021	12/17/2021
	OW-64	Quarterly	3/3/2021	6/24/2021	9/23/2021	12/29/2021
	OW-65	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	RW-1	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	RW-2	Quarterly	NS – SPH	NS – SPH	P&A	P&A
	RW-2R*	Quarterly	NA	NA	NS – SPH	NS – SPH
Western Boundary Wells	RW-5	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	RW-6	Quarterly	NS – SPH	NS – SPH	NS – SPH	NS – SPH
	BW-1A	Annually	NA	NA	NS – Dry	NA
	BW-1B	Annually	NA	NA	NS – Dry	NA
	BW-1C	Annually	NA	NA	9/29/2021	NA
	BW-2A	Annually	NA	NA	9/29/2021	NA
	BW-2B	Annually	NA	NA	9/29/2021	NA
	BW-2C	Annually	NA	NA	9/29/2021	NA
	BW-3A	Annually	NA	NA	NS – Dry	NA
	BW-3B	Annually	NA	NA	9/29/2021	NA
	BW-3C	Annually	NA	NA	9/29/2021	NA
	BW-4A	Annually	NA	NS – Dry	NS – Dry	NA
	BW-4B	Annually	3/10/2021	6/10/2021	9/29/2021	12/8/2021
	BW-5A	Annually	NA	NS – Dry	NS – Dry	NA
	BW-5B	Quarterly	3/3/2021	6/29/2021	9/23/2021	12/8/2021
	BW-5C	Quarterly	3/3/2021	6/29/2021	9/23/2021	12/8/2021

Abbreviations:

LDU - Leak Detection Unit

NA - Not Applicable

NS - Not Sampled

Q - Quarter

P&A - well was Plugged and Abandoned in 2021

RW - Recovery Well

SPH - Separate Phase Hydrocarbon

UTA - Unable to Access

Notes:

NS - Dry denotes a well that was either fully dry, or did not have enough water to sample

* - New well installed in July/August 2021

** - PW-2 is sampled every 3 years, beginning in 2008; next event is 2023

TABLE 3-2. CLEANUP LEVELS
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

ANALYTE	^a NMED GW Cleanup Levels (ug/L)	^b 40 CFR 141.62 (ug/L)	^c NMED Tap Water (ug/L)	^d USEPA RSL Tap Water HQ 1.0 (ug/L)	^e NMED TPH Levels	Cleanup Level (ug/L)
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	NA	NA	5.74	0.57	NA	5.74
1,1,1-Trichloroethane	200	NA	8,003	8,000	NA	200
1,1,2,2-Tetrachloroethane	10	NA	0.757	0.076	NA	10
1,1,2-Trichloroethane	5	NA	0.41 *	0.28	NA	5
1,1-Dichloroethane	25	NA	27.5	2.8	NA	25
1,1-Dichloroethene	7	NA	284	280	NA	7
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	7	NA	7
1,2,3-Trichloropropane	NA	NA	0.0084	0.00075	NA	0.0084
1,2,4-Trichlorobenzene	70	NA	3.98 *	1.2	NA	70
1,2,4-Trimethylbenzene	NA	NA	NA	56	NA	56
1,2-Dibromo-3-chloropropane	NA	NA	0.0033	0.00033	NA	0.0033
1,2-Dibromoethane	0.05	NA	0.0747	0.0075	NA	0.05
1,2-Dichlorobenzene	600	NA	302.5	300	NA	600
1,2-Dichloroethane	5	NA	1.71	0.17	NA	5
1,2-Dichloropropane	5	NA	4.38	0.85	NA	5
1,3,5-Trimethylbenzene	NA	NA	NA	60	NA	60
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	NA	NA	NA	370	NA	370
1,4-Dichlorobenzene	75	NA	4.82	0.48	NA	75
1,4-Dioxane	NA	NA	4.59	0.46	NA	4.59
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	NA	NA	5,565	5,600	NA	5,565
2-Chlorotoluene	NA	NA	233	240	NA	233
2-Hexanone	NA	NA	NA	38	NA	38
4-Chlorotoluene	NA	NA	NA	250	NA	250
4-Methyl-2-Pentanone	NA	NA	1,243	6,300	NA	1,243
Acetone	NA	NA	14,064	18,000	NA	14,064
Benzene	5	NA	4.55	0.46	NA	5
Bromobenzene	NA	NA	NA	62	NA	62
Bromodichloromethane	NA	NA	1.34	0.13	NA	1.34
Bromoform	NA	NA	32.9	3.3	NA	32.9
Bromomethane	NA	NA	7.54	7.5	NA	7.54
Carbon Disulfide	NA	NA	810	810	NA	810
Carbon tetrachloride	5	NA	4.55	0.46	NA	5
Chlorobenzene	NA	NA	77.6	78	NA	77.6
Chloroethane	NA	NA	20,857	8300	NA	20,857
Chloroform	100	NA	2.29	0.22	NA	100
Chloromethane	NA	NA	20.32	190	NA	20.32
cis-1,2-Dichloroethene	70	NA	36.5	36	NA	70
Cis-1,3-dichloropropene	NA	NA	NA	NA	NA	NA
Dibromochloromethane	NA	NA	1.68	0.87	NA	1.68
Dibromomethane	NA	NA	8	8.3	NA	8
Dichlorodifluoromethane	NA	NA	197	200	NA	197
Ethylbenzene	700	NA	14.99	1.5	NA	700
Hexachlorobutadiene	NA	NA	1.39	0.14	NA	1.39
Isopropylbenzene	NA	NA	447	450	NA	447
Methylene Chloride	5	NA	106.5 *	11	NA	5
Methyl Tert-Butyl Ether	NA	NA	143	14	NA	143
n-Butylbenzene	NA	NA	NA	1,000	NA	1,000
n-Propylbenzene	NA	NA	NA	660	NA	660
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	2,000	NA	2,000
Styrene	100	NA	1,205	1,200	NA	100
tert-Butylbenzene	NA	NA	NA	690	NA	690
Tetrachloroethene	5	NA	40.3 *	11	NA	5
Toluene	1,000	NA	1,093	1,100	NA	1,000
trans-1,2-Dichloroethene	100	NA	67.9	68	NA	100
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA
Trichloroethene	5	NA	2.59	0.49	NA	5
Trichlorofluoromethane	NA	NA	1,137	5,200	NA	1,137
Vinyl Chloride	2	NA	0.324	0.019	NA	2
Xylenes, Total	620	NA	193	190	NA	620

TABLE 3-2. CLEANUP LEVELS
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

ANALYTE	^a NMED GW Cleanup Levels (ug/L)	^b 40 CFR 141.62 (ug/L)	^c NMED Tap Water (ug/L)	^d USEPA RSL Tap Water HQ 1.0 (ug/L)	^e NMED TPH Levels	Cleanup Level (ug/L)
Semi-volatile Organic Compounds						
1,2,4-Trichlorobenzene	70	NA	3.98 *	1.2	NA	70
1,2-Dichlorobenzene	600	NA	302.5	300	NA	600
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	NA	4.82	0.48	NA	75
1,4-Dioxane	NA	NA	4.59	NA	NA	4.59
1-Methylnaphthalene	NA	NA	11.38	NA	NA	11.38
2,4,5-Trichlorophenol	NA	NA	1,166	1200	NA	1,166
2,4,6-Trichlorophenol	NA	NA	11.9 *	4.1	NA	11.9 *
2,4-Dichlorophenol	NA	NA	45.3	46	NA	45.3
2,4-Dimethylphenol	NA	NA	354	360	NA	354
2,4-Dinitrophenol	NA	NA	38.7	39	NA	38.7
2,4-Dinitro Toluene	NA	NA	2.38	0.24	NA	2.38
2,6-Dinitro Toluene	NA	NA	0.485	0.049	NA	0.485
2-Chloronaphthalene	NA	NA	733	NA	NA	733
2-Chlorophenol	NA	NA	91	91	NA	91
2-Methylnaphthalene	NA	NA	35.1	NA	NA	35.1
2-Methylphenol	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	190	NA	190
2-Nitrophenol	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	1.25	0.13	NA	1.25
3,4-Methylphenol	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol	NA	NA	1.52	NA	NA	1.52
4-Bromophenylphenylether	NA	NA	NA	NA	NA	NA
4-Chloro-3-Methylphenol	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	0.37	NA	0.37
4-Chlorophenylphenylether	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	3.8	NA	3.8
4-Nitrophenol	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	535	NA	NA	535
Acenaphthylene	NA	NA	NA	NA	NA	NA
Aniline	NA	NA	NA	13	NA	13
Anthracene	NA	NA	1,721	NA	NA	1,721
Azobenzene	NA	NA	NA	0.12	NA	0.12
Benzo(a)anthracene	NA	NA	0.12	0.03	NA	0.12
Benzo(a)pyrene	0.2	NA	0.251	0.03	NA	0.2
Benzo(b)fluoranthene	NA	NA	0.34	0.25	NA	0.34
Benzo(ghi)perylene	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	3.43	2.5	NA	3.43
Benzoic Acid	NA	NA	NA	75000	NA	75000
Benzyl Alcohol	NA	NA	NA	2000	NA	2000
Bis(2chloroethoxy)methane	NA	NA	NA	59	NA	59
Bis(2-chloroethyl)ether	NA	NA	0.137	0.014	NA	0.137
Bis(2-chloroisopropyl)ether	NA	NA	9.81	NA	NA	9.81
Bis(2-ethylhexyl)phthalate	NA	NA	55.64	5.6	NA	55.64
Benzyl Butyl Phthalate	NA	NA	NA	16	NA	16
Carbazole	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	34.3	25	NA	34.3
Dibenz(a,h)anthracene	NA	NA	0.034	0.03	NA	0.034
Dibenzofuran	NA	NA	NA	7.9	NA	NA
Diethylphthalate	NA	NA	14,801	NA	NA	14,801
Dimethyl Phthalate	NA	NA	612	NA	NA	612
Di-n-butylphthalate	NA	NA	885	900	NA	885
Di-n-octylphthalate	NA	NA	NA	200	NA	200
Fluoranthene	NA	NA	802	800	NA	802
Fluorene	NA	NA	288	290	NA	288
Hexachloro Benzene	NA	NA	0.0976	0.01	NA	0.0976
Hexachlorobutadiene	NA	NA	NA	0.14	NA	0.14
Hexachlorocyclopentadiene	NA	NA	0.41	0.14	NA	0.41
Hexachloroethane	NA	NA	3.28	0.33	NA	3.28
Indeno(1,2,3-cd)pyrene	NA	NA	0.343	0.25	NA	0.343
Isophorone	NA	NA	781	78	NA	781
Naphthalene	30	NA	1.17	0.12	NA	30
Nitrobenzene	NA	NA	1.4	0.14	NA	1.4
N-Nitrosodimethylamine	NA	NA	0.0049	0.00011	NA	0.0049
N-Nitrosodi-n-propylamine	NA	NA	NA	0.011	NA	0.011
N-Nitrosodiphenylamine	NA	NA	122	12	NA	122
Pentachlorophenol	1	NA	0.413	0.041	NA	1
Phenanthrene	NA	NA	170	NA	NA	170
Phenol	NA	NA	5,761	5800	NA	5,761
Pyrene	NA	NA	117	120	NA	117
Pyridine	NA	NA	NA	20	NA	20
Benzdine	NA	NA	0.0011	0.00011	NA	0.0011
2,3,4,6-Tetrachlorophenol	NA	NA	NA	240	NA	240
2,3,5,6-Tetrachlorophenol	NA	NA	NA	NA	NA	NA
Dibenz(a,h)acridine	NA	NA	NA	NA	NA	NA
7,12-Dimethylbenz(a)anthracene	NA	NA	NA	0.0001	NA	0.0001
1,2-Diphenylhydrazine	NA	NA	0.780	0.078	NA	0.780
Quinoline	NA	NA	NA	0.024	NA	0.024
Thiophenol (Benzenethiol)	NA	NA	NA	NA	NA	NA

TABLE 3-2. CLEANUP LEVELS
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

ANALYTE	^a NMED GW Cleanup Levels (ug/L)	^b 40 CFR 141.62 (ug/L)	^c NMED Tap Water (ug/L)	^d USEPA RSL Tap Water HQ 1.0 (ug/L)	^e NMED TPH Levels	Cleanup Level (ug/L)
Pesticides						
Aldrin	NA	NA	0.002	0.00092	NA	0.002
alpha-BHC	NA	NA	0.069	0.0072	NA	0.069
beta-BHC	NA	NA	0.243	0.025	NA	0.243
delta-BHC	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	0.415	0.042	NA	0.415
Chlordane	NA	NA	0.448	NA	NA	0.448
4,4'-DDD	NA	NA	0.317	0.032	NA	0.317
4,4'-DDE	NA	NA	0.462	0.046	NA	0.462
2,4-DDE	NA	NA	0.462	NA	NA	0.462
4,4'-DDT	NA	NA	2.29	0.23	NA	2.29
Dieldrin	NA	NA	0.018	0.0018	NA	0.018
Endosulfan I	NA	NA	98.7	NA	NA	98.7
Endosulfan II	NA	NA	98.7	NA	NA	98.7
Endosulfan Sulfate	NA	NA	NA	110	NA	110
Endrin	NA	NA	2.23	2.3	NA	2.23
Endrin Aldehyde	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	0.0221	0.0014	NA	0.0221
Heptachlor Epoxide	NA	NA	NA	0.0014	NA	0.0014
Methoxychlor	NA	NA	NA	37	NA	37
Toxaphene	NA	NA	0.158	0.071	NA	0.158
Total Metals						
Aluminum, Total	NA	NA	19,914	20000	NA	19,914
Antimony, Total	6	6	7.26	7.8	NA	6
Arsenic, Total	10	10	0.855	0.052	NA	10
Barium, Total	2,000	2,000	3,277	3,800	NA	2,000
Beryllium, Total	4	4	12.4	25	NA	4
Boron, Total	NA	NA	3,949	NA	NA	3,949
Cadmium, Total	5	5	6.24	1.8	NA	5
Calcium, Total	NA	NA	NA	NA	NA	NA
Chromium, Total	50	100	5.702	NA	NA	50
Cobalt, Total	NA	NA	5.98	6	NA	5.98
Copper, Total	NA	NA	790	800	NA	790
Iron, Total	NA	NA	13,822	14000	NA	13,822
Lead, Total	15	NA	NA	15	NA	15
Magnesium, Total	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	2,017	NA	NA	2,017
Mercury, Total	2	2	0.63	0.63	NA	2
Molybdenum, Total	NA	NA	98.7	100	NA	98.7
Nickel, Total	NA	NA	372	NA	NA	372
Potassium, Total	NA	NA	NA	NA	NA	NA
Selenium, Total	50	50	98.7	100	NA	50
Silver, Total	50	NA	81.2	94	NA	50
Sodium, Total	NA	NA	NA	NA	NA	NA
Thallium, Total	2	2	0.20	0.20	NA	2
Uranium, Total	30	NA	59.2	4	NA	30
Vanadium, Total	NA	NA	63.1	86	NA	63.1
Zinc, Total	NA	NA	5,960	6000	NA	5,960

TABLE 3-2. CLEANUP LEVELS
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

ANALYTE	^a NMED GW Cleanup Levels (ug/L)	^b 40 CFR 141.62 (ug/L)	^c NMED Tap Water (ug/L)	^d USEPA RSL Tap Water HQ 1.0 (ug/L)	^e NMED TPH Levels	Cleanup Level (ug/L)
Dissolved Metals						
Aluminum, Dissolved	NA	NA	19,914	NA	NA	19,914
Antimony, Dissolved	NA	6	7.26	NA	NA	6
Arsenic, Dissolved	NA	10	0.855	NA	NA	10
Barium, Dissolved	NA	2,000	3,277	NA	NA	2,000
Beryllium, Dissolved	NA	4	12.4	NA	NA	4
Boron, Dissolved	NA	NA	3,949	NA	NA	3,949
Cadmium, Dissolved	NA	5	6.24	NA	NA	5
Calcium, Dissolved	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	100	NA	NA	NA	100
Cobalt, Dissolved	NA	NA	5.98	NA	NA	5.98
Copper, Dissolved	NA	NA	790	NA	NA	790
Iron, Dissolved	NA	NA	13,822	NA	NA	13,822
Lead, Dissolved	NA	NA	NA	NA	NA	NA
Magnesium, Dissolved	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	2,017	NA	NA	2,017
Mercury, Dissolved	NA	NA	NA	NA	NA	NA
Molybdenum, Dissolved	NA	NA	98.7	NA	NA	98.7
Nickel, Dissolved	NA	NA	372	NA	NA	372
Potassium, Dissolved	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	50	98.7	NA	NA	50
Silver, Dissolved	NA	NA	81.2	NA	NA	81.2
Sodium, Dissolved	NA	NA	NA	NA	NA	NA
Thallium, Dissolved	NA	2	0.20	NA	NA	2
Uranium, Dissolved	NA	NA	NA	NA	NA	NA
Vanadium, Dissolved	NA	NA	63.1	NA	NA	63.1
Zinc, Dissolved	NA	NA	5,960	NA	NA	5,960
General Chemistry						
Biochemical Oxygen Demand (ug/L)	30,000	NA	NA	NA	NA	30,000
Bromide (ug/L)	NA	NA	NA	NA	NA	NA
Chemical Oxygen Demand (ug/L)	125,000	NA	NA	NA	NA	125,000
Chloride (ug/L)	250,000	NA	NA	NA	NA	250,000
Conductivity (umhos/cm)	NA	NA	NA	NA	NA	NA
Cyanide	NA	NA	1.46	NA	NA	1.46
Fluoride, Total (ug/L)	1,600	4,000	1,185	800	NA	1,600
Nitrate & Nitrite (ug/L)	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrate (ug/L)	10,000	10,000	NA	32,000	NA	10,000
Nitrogen, Nitrate & Nitrite (ug/L)	NA	10,000	NA	NA	NA	10,000
Nitrogen, Nitrite (ug/L)	1,000	1,000	NA	2,000	NA	1,000
Ortho-Phosphate (ug/L)	NA	NA	NA	NA	NA	NA
Ortho- Phosphorus (ug/L)	NA	NA	NA	NA	NA	NA
Sulfate (ug/L)	600,000	NA	NA	NA	NA	600,000
Diesel Range Organics (ug/L)	NA	NA	NA	NA	16.7	16.7
Gasoline Range Organics (ug/L)	NA	NA	NA	NA	10.1	10.1
TPH (C6-C10) (ug/L)	NA	NA	NA	NA	10.1	10.1
Motor Oil (ug/L)	NA	NA	NA	NA	85.8	85.8
Oil Range Organics (ug/L)	NA	NA	NA	NA	85.8	85.8
TPH (C28-C40) (ug/L)	NA	NA	NA	NA	85.8	85.8
Total Dissolved Solids (ug/L)	500	NA	NA	NA	NA	500
Solids, Total Suspended (ug/L)	NA	NA	NA	NA	NA	NA
Soluble Salt (ug/L)	NA	NA	NA	NA	NA	NA
Coliform, E-Coli (MPN/100ml)	500	NA	NA	NA	NA	500
E-Coli (MPN/100ml)	500	NA	NA	NA	NA	500
pH (Std Units)	6.6 – 8.6	NA	NA	NA	NA	6.6 – 8.6
Resistivity (Mohm/cm)	NA	NA	NA	NA	NA	NA
Temperature (oC)	NA	NA	NA	NA	NA	NA
PFAS						
Total PFOA, PFOS, PFHxS (ng/L)	NA	NA	NA	NA	NA	70 ^f

Notes:

*Non-cancer tap water value were smaller than the cancer tap water values; the smaller of the two standards was used.

^aNMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103

^b40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels

^cNMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021

^dUSEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021

^eNMED Levels - New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021

^fTotal PFAS concentration exceeded the Health Advisory provided by EPA in the "Drinking Water Health Advisories for PFOA and PFOS" available at:

<https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>

MPN/100ml = most probable number per 100 milliliters

NA = not applicable

ng/L = nanograms per liter

PFAS = Per- and Polyfluoroalkyl Substances

PFHxS = Perfluorohexanesulfonic acid

PFOA = Perfluorooctanoic acid

PFOS = Perfluorooctane sulfonic acid

std = standard

oC = degrees Celsius

ug/L = micrograms per liter

umhos/cm = microhoms per centimeter

Mohm/cm = megahom per centimeter

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

	Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
Alluvial/Fluvial Upper Sand Aquifer	BW-1A	9/8/2016	ND	Dry	NA	Dry	6883.17	6885.12	1.95	44.11	30.0	35.0
	BW-1A	9/13/2017	ND	Dry	NA	Dry	6883.17	6885.12	1.95	44.11	30.0	35.0
	BW-1A	8/15/2018	ND	Dry	NA	Dry	6883.17	6885.12	1.95	40.66	30.0	35.0
	BW-1A	8/14/2019	ND	Dry	NA	Dry	6883.17	6885.12	1.95	40.66	30.0	35.0
	BW-1A	9/14/2020	ND	Dry	NA	Dry	6883.17	6885.12	1.95	41.75	30.0	35.0
	BW-1A	9/28/2021	ND	Dry	NA	Dry	6883.17	6885.12	1.95	41.75	30.0	35.0
	BW-2A	9/8/2016	ND	29.48	NA	6842.40	6871.88	6874.69	2.81	64.76	55.0	65.0
	BW-2A	9/13/2017	ND	29.63	NA	6842.25	6871.88	6874.69	2.81	64.76	55.0	65.0
	BW-2A	8/15/2018	ND	29.53	NA	6842.35	6871.88	6874.69	2.81	64.76	55.0	65.0
	BW-2A	8/14/2019	ND	29.45	NA	6842.43	6871.88	6874.69	2.81	64.76	55.0	65.0
	BW-2A	9/14/2020	ND	30.12	NA	6841.76	6871.88	6874.69	2.81	64.40	55.0	65.0
	BW-2A	9/28/2021	ND	30.04	NA	6841.84	6871.88	6874.69	2.81	64.40	55.0	65.0
	BW-3A	9/8/2016	ND	Dry	NA	Dry	6875.94	6878.39	2.45	49.90	39.5	49.5
	BW-3A	9/13/2017	ND	Dry	NA	Dry	6875.94	6878.39	2.45	49.90	39.5	49.5
	BW-3A	8/15/2018	ND	Dry	NA	Dry	6875.94	6878.39	2.45	49.93	39.5	49.5
	BW-3A	8/14/2019	ND	Dry	NA	Dry	6875.94	6878.39	2.45	49.93	39.5	49.5
	BW-3A	9/14/2020	ND	Dry	NA	Dry	6875.94	6878.39	2.45	50.85	39.5	49.5
	BW-3A	9/28/2021	ND	Dry	NA	Dry	6875.94	6878.39	2.45	50.85	39.5	49.5
	BW-4A	10/16/2019	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.40	21.0	36.0
	BW-4A	3/9/2020	ND	35.42	NA	6834.84	6870.67	6873.18	2.92	35.88	21.0	36.0
	BW-4A	6/30/2020	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.88	21.0	36.0
	BW-4A	9/14/2020	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.98	21.0	36.0
	BW-4A	12/7/2020	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.98	21.0	36.0
	BW-4A	2/27/2021	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.98	21.0	36.0
	BW-4A	6/3/2021	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.98	21.0	36.0
	BW-4A	9/28/2021	ND	Dry	NA	Dry	6870.67	6873.18	2.92	35.98	21.0	36.0
	BW-5A	10/16/2019	ND	20.37	NA	6853.75	6874.39	6877.00	2.88	20.42	10.0	20.0
	BW-5A	3/5/2020	ND	Dry	NA	Dry	6874.39	6877.00	2.88	20.12	10.0	20.0
	BW-5A	6/26/2020	ND	20.33	NA	6853.79	6874.39	6877.00	2.88	20.12	10.0	20.0
	BW-5A	9/14/2020	ND	Dry	NA	Dry	6874.39	6877.00	2.88	20.52	10.0	20.0
BW-5A	12/7/2020	ND	20.39	NA	6853.73	6874.39	6877.00	2.88	20.52	10.0	20.0	
BW-5A	2/27/2021	ND	20.35	NA	6853.77	6874.39	6877.00	2.88	20.45	10.0	20.0	
BW-5A	6/3/2021	ND	Dry	NA	Dry	6874.39	6877.00	2.88	20.45	10.0	20.0	
BW-5A	9/9/2021	ND	Dry	NA	Dry	6874.39	6877.00	2.88	20.45	10.0	20.0	
Chinle/Alluvium Aquifer	BW-1B	9/8/2016	ND	Dry	NA	Dry	6883.17	6885.78	2.61	73.68	54.6	64.6
	BW-1B	9/13/2017	ND	Dry	NA	Dry	6883.17	6885.78	2.61	73.68	54.6	64.6
	BW-1B	8/15/2018	ND	Dry	NA	Dry	6883.17	6885.78	2.61	70.94	54.6	64.6
	BW-1B	8/14/2019	ND	69.61	NA	6813.56	6883.17	6885.78	2.61	70.94	54.6	64.6
	BW-1B	9/14/2020	ND	Dry	NA	Dry	6883.17	6885.78	2.61	70.77	54.6	64.6
	BW-1B	9/28/2021	ND	Dry	NA	Dry	6883.17	6885.78	2.61	70.77	54.6	64.6
	BW-2B	9/8/2016	ND	25.00	NA	6846.66	6871.66	6874.50	2.84	89.42	80.0	90.0
	BW-2B	9/13/2017	ND	25.44	NA	6846.22	6871.66	6874.50	2.84	89.42	80.0	90.0
	BW-2B	8/15/2018	ND	25.41	NA	6846.25	6871.66	6874.50	2.84	89.42	80.0	90.0
	BW-2B	8/14/2019	ND	25.61	NA	6846.05	6871.66	6874.50	2.84	89.42	80.0	90.0
	BW-2B	9/14/2020	ND	25.95	NA	6845.71	6871.66	6874.50	2.84	89.42	80.0	90.0
	BW-2B	9/28/2021	ND	25.52	NA	6846.14	6871.66	6874.50	2.84	89.42	80.0	90.0
	BW-3B	9/8/2016	ND	30.99	NA	6845.17	6876.16	6878.59	2.43	66.97	63.0	73.0
	BW-3B	9/13/2017	ND	30.95	NA	6845.21	6876.16	6878.59	2.43	66.97	63.0	73.0
	BW-3B	8/15/2018	ND	30.92	NA	6845.24	6876.16	6878.59	2.43	66.97	63.0	73.0
	BW-3B	8/14/2019	ND	30.88	NA	6845.28	6876.16	6878.59	2.43	66.97	63.0	73.0
	BW-3B	9/14/2020	ND	31.81	NA	6844.35	6876.16	6878.59	2.43	67.11	63.0	73.0
	BW-3B	9/28/2021	ND	31.20	NA	6844.96	6876.16	6878.59	2.43	67.11	63.0	73.0
	BW-4B	3/9/2020	ND	37.56	NA	6832.88	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	6/26/2020	NA	NA	NA	NA	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	6/30/2020	ND	41.96	NA	6828.48	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	9/14/2020	ND	37.07	NA	6833.37	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	12/7/2020	ND	33.07	NA	6837.37	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	2/27/2021	ND	44.29	NA	6826.15	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	6/2/2021	ND	42.79	NA	6827.65	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-4B	9/28/2021	ND	39.72	NA	6830.72	6870.62	6873.23	2.79	60.71	41.0	61.0
	BW-5B	10/16/2019	ND	7.73	NA	6866.55	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	3/5/2020	ND	7.40	NA	6866.88	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	6/26/2020	ND	7.67	NA	6866.61	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	9/14/2020	ND	8.07	NA	6866.21	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	12/7/2020	ND	7.99	NA	6866.29	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	2/27/2021	ND	6.87	NA	6867.41	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	6/2/2021	ND	7.96	NA	6866.32	6874.32	6876.82	2.54	58.91	48.0	58.0
	BW-5B	9/9/2021	ND	8.46	NA	6865.82	6874.32	6876.82</				

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
MKTF-01	1/28/2021	5.21	5.69	0.48	6912.59	6918.28	6920.67	2.39	15.04	5.0	15.0
MKTF-01	2/28/2021	3.31	3.54	0.23	6914.74	6918.28	6920.67	2.39	15.06	5.0	15.0
MKTF-01	3/31/2021	3.70	3.94	0.24	6914.34	6918.28	6920.67	2.39	15.06	5.0	15.0
MKTF-01	4/26/2021	3.49	3.83	0.34	6914.45	6918.28	6920.67	2.39	15.06	5.0	15.0
MKTF-01	5/20/2021	4.02	4.38	0.36	6913.90	6918.28	6920.67	2.39	15.06	5.0	15.0
MKTF-01	6/1/2021	3.42	3.73	0.31	6914.55	6918.28	6920.67	2.39	14.99	5.0	15.0
MKTF-01R	8/31/2021	ND	3.60	NA	NA	6921.82	NA	-0.20	18.20	3.0	18.0
MKTF-01R	12/3/2021	ND	3.55	NA	6918.27	6921.82	6921.62	-0.20	18.30	3.0	18.0
MKTF-02	2/24/2020	ND	4.07	NA	6910.93	6915.00	6917.45	2.45	18.03	7.0	17.0
MKTF-02	6/26/2020	ND	5.25	NA	6909.75	6915.00	6917.45	2.45	18.03	7.0	17.0
MKTF-02	9/15/2020	ND	5.43	NA	6909.57	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	11/10/2020	ND	4.98	NA	6910.02	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	12/3/2020	ND	5.27	NA	6909.73	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	1/28/2021	ND	5.30	NA	6909.70	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	2/28/2021	ND	4.69	NA	6910.31	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	3/31/2021	ND	5.39	NA	6909.61	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	4/26/2021	ND	5.33	NA	6909.67	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	5/20/2021	ND	5.66	NA	6909.34	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02	6/1/2021	ND	5.57	NA	6909.43	6915.00	6917.45	2.45	18.09	7.0	17.0
MKTF-02R	8/31/2021	ND	13.65	NA	NA	6920.46	NA	2.45	19.05	3.0	18.0
MKTF-02R	12/15/2021	ND	7.73	NA	6912.75	6920.46	6922.93	2.45	19.04	3.0	18.0
MKTF-03	3/5/2020	6.51	7.88	1.37	6923.85	6931.73	6931.69	-0.04	18.49	3.0	18.0
MKTF-03	6/26/2020	7.40	8.67	1.27	6923.06	6931.73	6931.69	-0.04	18.49	3.0	18.0
MKTF-03	9/15/2020	7.12	7.13	0.01	6924.60	6931.73	6931.69	-0.04	18.63	3.0	18.0
MKTF-03	11/10/2020	7.17	8.47	1.30	6923.26	6931.73	6931.69	-0.04	18.63	3.0	18.0
MKTF-03	12/3/2020	7.50	8.66	1.16	6923.07	6931.73	6931.69	-0.04	18.62	3.0	18.0
MKTF-03	1/28/2021	7.84	8.77	0.93	6922.96	6931.73	6931.69	-0.04	18.61	3.0	18.0
MKTF-03	2/28/2021	7.50	8.43	0.93	6923.30	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-03	3/31/2021	7.24	8.27	1.03	6923.46	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-03	4/26/2021	7.15	7.95	0.80	6923.78	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-03	5/20/2021	7.32	8.41	1.09	6923.32	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-03	6/1/2021	7.37	8.50	1.13	6923.23	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-03	9/9/2021	7.37	8.50	1.13	6923.23	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-03	12/3/2021	7.71	8.97	1.26	6922.76	6931.73	6931.69	-0.04	18.66	3.0	18.0
MKTF-04	3/2/2020	ND	8.80	NA	6925.10	6933.90	6933.57	-0.33	22.54	10.0	22.0
MKTF-04	6/26/2020	ND	10.08	NA	6923.82	6933.90	6933.57	-0.33	22.48	10.0	22.0
MKTF-04	9/15/2020	9.72	9.73	0.01	6924.17	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	11/10/2020	ND	9.53	NA	6924.37	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	12/3/2020	10.03	10.04	0.01	6923.86	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	1/28/2021	ND	10.47	NA	6923.43	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	2/28/2021	10.17	10.29	0.12	6923.61	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	3/31/2021	9.54	9.56	0.02	6924.34	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	4/26/2021	9.53	9.55	0.02	6924.35	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	5/20/2021	9.61	9.71	0.10	6924.19	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04	6/1/2021	9.52	9.55	0.03	6924.35	6933.90	6933.57	-0.33	23.05	10.0	22.0
MKTF-04R	8/30/2021	ND	10.13	NA	NA	6938.49	NA	-0.53	19.73	4.0	19.0
MKTF-04R	12/3/2021	ND	10.18	NA	6928.31	6938.49	6937.96	-0.53	19.73	4.0	19.0
MKTF-05	3/5/2020	10.85	10.99	0.14	6928.50	6939.49	6942.22	2.73	15.02	4.0	14.0
MKTF-05	6/25/2020	11.33	12.07	0.74	6927.42	6939.49	6942.22	2.73	15.02	4.0	14.0
MKTF-05	9/15/2020	10.92	11.95	1.03	6927.54	6939.49	6942.22	2.73	15.10	4.0	14.0
MKTF-05	11/10/2020	11.29	12.17	0.88	6927.32	6939.49	6942.22	2.73	15.10	4.0	14.0
MKTF-05	12/3/2020	11.39	12.20	0.81	6927.29	6939.49	6942.22	2.73	15.07	4.0	14.0
MKTF-05	1/28/2021	12.21	12.40	0.19	6927.09	6939.49	6942.22	2.73	15.07	4.0	14.0
MKTF-05	2/28/2021	11.87	12.02	0.15	6927.47	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-05	3/31/2021	12.26	12.32	0.06	6927.17	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-05	4/26/2021	12.30	12.44	0.14	6927.05	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-05	5/20/2021	12.29	12.36	0.07	6927.13	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-05	6/1/2021	12.15	12.23	0.08	6927.26	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-05	9/7/2021	11.54	12.61	1.07	6926.88	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-05	12/3/2021	11.77	12.37	0.60	6927.12	6939.49	6942.22	2.73	15.04	4.0	14.0
MKTF-06	3/5/2020	14.32	16.03	1.71	6928.21	6944.24	6946.81	2.57	21.20	10.0	20.0
MKTF-06	6/25/2020	11.48	16.33	4.85	6927.91	6944.24	6946.81	2.57	21.20	10.0	20.0
MKTF-06	9/15/2020	14.21	16.14	1.93	6928.10	6944.24	6946.81	2.57	21.22	10.0	20.0
MKTF-06	11/10/2020	14.63	16.02	1.39	6928.22	6944.24	6946.81	2.57	21.22	10.0	20.0
MKTF-06	12/3/2020	14.81	15.92	1.11	6928.32	6944.24	6946.81	2.57	21.22	10.0	20.0
MKTF-06	1/28/2021	15.52	17.08	1.56	6927.16	6944.24	6946.81	2.57	21.22	10.0	20.0
MKTF-06	2/28/2021	15.36	16.08	0.72	6928.16	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-06	3/31/2021	15.40	15.58	0.18	6928.66	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-06	4/26/2021	15.31	15.38	0.07	6928.86	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-06	5/20/2021	15.44	15.56	0.12	6928.68	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-06	6/1/2021	15.52	15.68	0.16	6928.56	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-06	9/7/2021	15.41	16.09	0.68	6928.15	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-06	12/3/2021	15.44	16.39	0.95	6927.85	6944.24	6946.81	2.57	21.28	10.0	20.0
MKTF-07	3/5/2020	9.72	10.94	1.22	6933.46	6944.40	6947.18	2.78	14.84	4.0	14.0
MKTF-07	6/25/2020	9.45	10.98	1.53	6933.42	6944.40	6947.18	2.78	14.84	4.0	14.0
MKTF-07	9/18/2020	8.64	10.99	2.35	6933.41	6944.40	6947.18	2.78	14.65	4.0	14.0
MKTF-07	11/10/2020	9.78	10.98	1.20	6933.42	6944.40	6947.18	2.78	14.65	4.0	14.0
MKTF-07	12/3/2020	10.15	11.02	0.87	6933.38	6944.40	6947.18	2.78	14.88	4.0	14.0
MKTF-07	1/28/2021	11.02	11.42	0.40	6932.98	6944.40	6947.18	2.78	14.88	4.0	14.0
MKTF-07	2/28/2021	10.73	10.94	0.21	6933.46	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-07	3/31/2021	10.92	11.03	0.11	6933.37	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-07	4/26/2021	10.73	10.98	0.25	6933.42	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-07	5/20/2021	10.90	11.03	0.13	6933.37	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-07	6/1/2021	10.74	10.85	0.11	6933.55	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-07	9/7/2021	10.48	10.90	0.42	6933.50	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-07	12/3/2021	11.11	11.25	0.14	6933.15	6944.40	6947.18	2.78	15.08	4.0	14.0
MKTF-08	3/5/2020	10.96	11.30	0.34	6932.72	6944.02	6947.09	3.07	18.91	8.0	18.0
MKTF-08	6/25/2020	10.93	11.33	0.40	6932.69	6944.02	6947.09	3.07	18.91	8.0	18.0
MKTF-08	9/18/2020	10.69	11.08	0.39	6932.94	6944.02	6947.09	3.07	18.93	8.0	18.0
MKTF-08	11/10/2020	11.16	11.62	0.46	6932.40	6944.02	6947.09	3.07	18.93	8.0	18.0
MKTF-08	12/3/2020	11.29	11.69	0.40	6932.33	6944.02	6947.09	3.07	18.94	8.0	18.0
MKTF-08	1/28/2021	11.77	12.08	0.31	6931.94	6944.02	6947.09	3.07	18.94	8.0	18.0
MKTF-08	2/28/2021	11.69	11.82	0.13	6932.20	6944.02	6947.09	3.07	18.93	8.0	18.0
MKTF-08	3/31/2021	11.53	11.63	0.10	6932.39	6944.02	6947.09	3.07	18.93	8.0	18.0
MKTF-08	4/26/2021	11.57	11.68	0.11	6932.34	6944.02	6947.09	3.07	18.93	8.0	18.0
MKTF-08											

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
MKTF-11	9/18/2020	7.86	7.87	0.01	6923.74	6931.61	6931.34	-0.27	18.72	8.0	18.0
MKTF-11	11/10/2020	ND	7.88	NA	6923.73	6931.61	6931.34	-0.27	18.72	8.0	18.0
MKTF-11	12/3/2020	8.16	8.18	0.02	6923.43	6931.61	6931.34	-0.27	18.72	8.0	18.0
MKTF-11	1/28/2021	ND	8.15	NA	6923.46	6931.61	6931.34	-0.27	18.72	8.0	18.0
MKTF-11	2/28/2021	ND	8.11	NA	6923.50	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-11	3/31/2021	ND	7.90	NA	6923.71	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-11	4/26/2021	ND	7.97	NA	6923.64	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-11	5/20/2021	ND	7.94	NA	6923.67	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-11	6/1/2021	ND	7.83	NA	6923.78	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-11	9/9/2021	ND	8.86	NA	6922.75	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-11	12/15/2021	ND	8.69	NA	6922.92	6931.61	6931.34	-0.27	18.80	8.0	18.0
MKTF-12	2/27/2020	15.43	15.51	0.08	6924.19	6939.70	6942.11	2.41	23.19	12.0	22.0
MKTF-12	6/29/2020	16.72	16.84	0.12	6922.86	6939.70	6942.11	2.41	23.19	12.0	22.0
MKTF-12	9/18/2020	16.23	16.24	0.01	6923.46	6939.70	6942.11	2.41	23.41	12.0	22.0
MKTF-12	11/10/2020	15.56	15.59	0.03	6924.11	6939.70	6942.11	2.41	23.41	12.0	22.0
MKTF-12	12/3/2020	16.49	16.65	0.16	6923.05	6939.70	6942.11	2.41	23.48	12.0	22.0
MKTF-12	1/28/2021	17.05	17.22	0.17	6922.48	6939.70	6942.11	2.41	23.48	12.0	22.0
MKTF-12	2/28/2021	16.41	16.51	0.10	6923.19	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-12	3/31/2021	16.18	16.22	0.04	6923.48	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-12	4/26/2021	16.08	16.19	0.11	6923.51	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-12	5/20/2021	16.29	16.32	0.03	6923.38	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-12	5/20/2021	16.62	16.67	0.05	6923.03	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-12	9/9/2021	16.60	16.68	0.08	6923.02	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-12	12/3/2021	16.68	16.79	0.11	6922.91	6939.70	6942.11	2.41	23.44	12.0	22.0
MKTF-13	2/27/2020	9.62	15.80	6.18	6917.87	6933.67	6935.18	1.51	19.74	8.0	18.0
MKTF-13	6/29/2020	11.16	16.70	5.54	6916.97	6933.67	6935.18	1.51	19.74	8.0	18.0
MKTF-13	9/18/2020	11.04	15.41	4.37	6918.26	6933.67	6935.18	1.51	20.62	8.0	18.0
MKTF-13	11/10/2020	10.47	14.85	4.38	6918.82	6933.67	6935.18	1.51	20.62	8.0	18.0
MKTF-13	12/3/2020	11.33	15.14	3.81	6918.53	6933.67	6935.18	1.51	20.41	8.0	18.0
MKTF-13	1/28/2021	11.74	15.75	4.01	6917.92	6933.67	6935.18	1.51	20.41	8.0	18.0
MKTF-13	2/28/2021	11.09	15.39	4.30	6918.28	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-13	3/31/2021	10.70	15.14	4.44	6918.53	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-13	4/26/2021	10.74	14.82	4.08	6918.85	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-13	5/20/2021	10.60	15.19	4.59	6918.48	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-13	6/1/2021	10.42	14.16	3.74	6919.51	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-13	9/7/2021	11.49	15.09	3.60	6918.58	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-13	12/3/2021	11.96	14.31	2.35	6919.36	6933.67	6935.18	1.51	20.24	8.0	18.0
MKTF-14	2/27/2020	2.98	3.28	0.30	6922.37	6925.65	6928.02	2.37	15.09	4.0	14.0
MKTF-14	6/29/2020	4.01	6.21	2.20	6919.44	6925.65	6928.02	2.37	15.09	4.0	14.0
MKTF-14	9/18/2020	3.81	5.79	1.98	6919.86	6925.65	6928.02	2.37	14.95	4.0	14.0
MKTF-14	11/10/2020	3.61	3.91	0.30	6921.74	6925.65	6928.02	2.37	14.95	4.0	14.0
MKTF-14	12/3/2020	4.42	4.69	0.27	6920.96	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	1/28/2021	4.74	5.04	0.30	6920.61	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	2/28/2021	4.27	4.61	0.34	6921.04	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	3/31/2021	3.77	3.89	0.12	6921.76	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	4/26/2021	3.74	3.81	0.07	6921.84	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	5/20/2021	3.83	3.94	0.11	6921.71	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	6/1/2021	3.44	3.60	0.16	6922.05	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	9/7/2021	4.65	4.82	0.17	6920.83	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-14	12/3/2021	4.80	5.02	0.22	6920.63	6925.65	6928.02	2.37	15.18	4.0	14.0
MKTF-15	10/30/2019	12.91	12.96	0.05	6930.78	6943.74	6943.48	-0.26	19.74	9.0	19.0
MKTF-15	2/3/2020	13.28	13.37	0.09	6930.37	6943.74	6943.48	-0.26	19.74	9.0	19.0
MKTF-15	6/26/2020	13.37	13.43	0.06	6930.31	6943.74	6943.48	-0.26	19.74	9.0	19.0
MKTF-15	9/18/2020	13.26	13.29	0.03	6930.45	6943.74	6943.48	-0.26	19.44	9.0	19.0
MKTF-15	11/10/2020	13.65	13.86	0.21	6929.88	6943.74	6943.48	-0.26	19.78	9.0	19.0
MKTF-15	1/28/2021	13.80	14.01	0.21	6929.73	6943.74	6943.48	-0.26	19.78	9.0	19.0
MKTF-15	2/28/2021	13.71	13.78	0.07	6929.96	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-15	3/31/2021	13.65	13.68	0.03	6930.06	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-15	4/26/2021	13.37	13.58	0.21	6930.16	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-15	5/20/2021	13.77	13.84	0.07	6929.90	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-15	6/1/2021	13.69	13.73	0.04	6930.01	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-15	9/7/2021	13.55	14.17	0.62	6929.57	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-15	12/3/2021	13.53	14.22	0.69	6929.52	6943.74	6943.48	-0.26	19.79	9.0	19.0
MKTF-16	2/5/2020	ND	10.10	NA	6940.90	6951.00	6950.58	-0.42	14.52	4.0	14.0
MKTF-16	6/26/2020	ND	9.96	NA	6941.04	6951.00	6950.58	-0.42	14.52	4.0	14.0
MKTF-16	9/18/2020	9.60	9.61	0.01	6941.39	6951.00	6950.58	-0.42	11.34	4.0	14.0
MKTF-16	11/10/2020	ND	7.62	NA	6943.38	6951.00	6950.58	-0.42	11.34	4.0	14.0
MKTF-16	12/8/2020	ND	10.12	NA	6940.88	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	1/28/2021	ND	6.57	NA	6944.43	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	2/28/2021	ND	9.26	NA	6941.74	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	3/31/2021	ND	9.73	NA	6941.27	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	4/26/2021	ND	9.93	NA	6941.07	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	5/20/2021	ND	9.82	NA	6941.18	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	6/1/2021	ND	9.70	NA	6941.30	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	6/23/2021	ND	Dry	NA	Dry	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	9/8/2021	ND	9.12	NA	6941.88	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-16	12/21/2021	ND	8.87	NA	6942.13	6951.00	6950.58	-0.42	11.37	4.0	14.0
MKTF-17	2/3/2020	11.47	16.88	5.41	6928.91	6945.79	6945.76	-0.03	24.14	14.0	24.0
MKTF-17	6/29/2020	10.22	15.53	5.31	6930.26	6945.79	6945.76	-0.03	24.14	14.0	24.0
MKTF-17	9/14/2020	10.03	15.40	5.37	6930.39	6945.79	6945.76	-0.03	24.70	14.0	24.0
MKTF-17	11/10/2020	11.42	11.62	0.20	6934.17	6945.79	6945.76	-0.03	24.70	14.0	24.0
MKTF-17	12/4/2020	11.31	11.50	0.19	6934.29	6945.79	6945.76	-0.03	24.69	14.0	24.0
MKTF-17	1/28/2021	11.91	11.93	0.02	6933.86	6945.79	6945.76	-0.03	24.68	14.0	24.0
MKTF-17	2/28/2021	11.91	11.93	0.02	6933.86	6945.79	6945.76	-0.03	24.73	14.0	24.0
MKTF-17	3/31/2021	12.09	12.12	0.03	6933.67	6945.79	6945.76	-0.03	24.73	14.0	24.0
MKTF-17	4/26/2021	15.00	15.02	0.02	6930.77	6945.79	6945.76	-0.03	24.73	14.0	24.0
MKTF-17	5/20/2021	15.06	15.09	0.03	6930.70	6945.79	6945.76	-0.03	24.73	14.0	24.0
MKTF-17	6/1/2021	15.13	15.18	0.05	6930.61	6945.79	6945.76	-0.03	24.73	14.0	24.0
MKTF-17R	8/30/2021	ND	12.34	NA	NA	6950.61	NA	-0.41	25.11	5.0	20.0
MKTF-17R	12/3/2021	ND	12.80	NA	6937.81	6950.61	6950.20	-0.41	20.91	5.0	20.0
MKTF-18	2/5/2020	ND	9.42	NA	6941.55	6950.97	6950.65	-0.32	25.70	17.0	27.0
MKTF-18	6/30/2020	ND	9.30	NA	6941.67	6950.97	6950.65	-0.32	25.70	17.0	27.0
MKTF-18	9/18/2020	8.81	8.82	0.01	6942.15	6950.97	6950.65	-0.32	22.05	17.0	27.0
MKTF-18	11/10/2020	ND	9.06	NA	6941.91	6950.97	6950.65	-0.32	22.05	17.0	27.0
MKTF-18	12/4/2020	ND	9.12	NA	6941.85	6950.97	6950.65	-0.32	25.82	17.0	27.0
MKTF-18	1/28/2021	ND									

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
MKTF-20	9/8/2021	ND	Dry	NA	Dry	6951.89	6951.78	-0.11	9.72	1.0	9.75
MKTF-20	12/2/2021	ND	9.03	NA	6942.86	6951.89	6951.78	-0.11	9.72	1.0	9.75
MKTF-21	2/5/2020	ND	8.36	NA	6944.32	6952.68	6952.57	-0.11	8.94	1.0	9.75
MKTF-21	6/26/2020	8.28	8.31	0.03	6944.37	6952.68	6952.57	-0.11	8.94	1.0	9.75
MKTF-21	9/15/2020	7.19	7.20	0.01	6945.48	6952.68	6952.57	-0.11	8.95	1.0	9.75
MKTF-21	11/10/2020	ND	6.52	NA	6946.16	6952.68	6952.57	-0.11	8.95	1.0	9.75
MKTF-21	12/4/2020	8.15	8.16	0.01	6944.52	6952.68	6952.57	-0.11	8.91	1.0	9.75
MKTF-21	1/28/2021	ND	7.45	NA	6945.23	6952.68	6952.57	-0.11	8.91	1.0	9.75
MKTF-21	2/28/2021	ND	7.92	NA	6944.76	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-21	3/31/2021	ND	7.84	NA	6944.84	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-21	4/26/2021	ND	7.39	NA	6945.29	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-21	5/20/2021	ND	7.51	NA	6945.17	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-21	6/1/2021	ND	7.09	NA	6945.59	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-21	9/8/2021	ND	8.91	NA	6943.77	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-21	12/3/2021	ND	8.96	NA	6943.72	6952.68	6952.57	-0.11	8.98	1.0	9.75
MKTF-22	2/27/2020	21.93	22.98	1.05	6916.78	6939.76	6942.31	2.55	32.70	22.0	32.0
MKTF-22	6/29/2020	22.02	25.16	3.14	6914.60	6939.76	6942.31	2.55	32.70	22.0	32.0
MKTF-22	9/14/2020	22.43	25.13	2.70	6914.63	6939.76	6942.31	2.55	32.54	22.0	32.0
MKTF-22	11/10/2020	22.39	24.74	2.35	6915.02	6939.76	6942.31	2.55	32.54	22.0	32.0
MKTF-22	12/4/2020	22.55	25.00	2.45	6914.76	6939.76	6942.31	2.55	32.54	22.0	32.0
MKTF-22	1/28/2021	22.73	25.42	2.69	6914.34	6939.76	6942.31	2.55	32.54	22.0	32.0
MKTF-22	2/28/2021	22.62	25.30	2.68	6914.46	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-22	3/31/2021	23.22	24.70	1.48	6915.06	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-22	4/26/2021	23.46	23.68	0.22	6916.08	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-22	5/20/2021	22.60	24.43	1.83	6915.33	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-22	6/1/2021	23.55	25.65	2.10	6914.11	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-22	9/8/2021	22.93	25.11	2.18	6914.65	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-22	12/3/2021	22.90	24.97	2.07	6914.79	6939.76	6942.31	2.55	33.11	22.0	32.0
MKTF-23	2/27/2020	10.67	10.67	0.00	6916.56	6927.23	6929.98	2.75	17.61	7.0	17.0
MKTF-23	6/29/2020	ND	10.50	NA	6916.73	6927.23	6929.98	2.75	17.61	7.0	17.0
MKTF-23	9/19/2020	12.67	12.69	0.02	6914.54	6927.23	6929.98	2.75	17.27	7.0	17.0
MKTF-23	11/10/2020	ND	11.48	NA	6915.75	6927.23	6929.98	2.75	17.27	7.0	17.0
MKTF-23	12/4/2020	11.40	11.41	0.01	6915.82	6927.23	6929.98	2.75	17.64	7.0	17.0
MKTF-23	1/28/2021	11.47	11.48	0.01	6915.75	6927.23	6929.98	2.75	18.01	7.0	17.0
MKTF-23	2/28/2021	11.63	11.64	0.01	6915.59	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-23	3/31/2021	ND	11.46	NA	6915.77	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-23	4/26/2021	ND	11.15	NA	6916.08	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-23	5/20/2021	ND	11.44	NA	6915.79	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-23	6/1/2021	ND	11.23	NA	6916.00	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-23	9/8/2021	11.69	11.72	0.03	6915.51	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-23	12/3/2021	11.54	11.59	0.05	6915.64	6927.23	6929.98	2.75	17.66	7.0	17.0
MKTF-24	2/24/2020	ND	19.52	NA	6906.55	6926.07	6928.72	2.65	27.82	18.0	28.0
MKTF-24	6/26/2020	ND	20.15	NA	6905.92	6926.07	6928.72	2.65	27.82	18.0	28.0
MKTF-24	9/15/2020	ND	20.70	NA	6905.37	6926.07	6928.72	2.65	28.48	18.0	28.0
MKTF-24	11/10/2020	ND	20.67	NA	6905.40	6926.07	6928.72	2.65	28.48	18.0	28.0
MKTF-24	12/4/2020	ND	20.57	NA	6905.50	6926.07	6928.72	2.65	28.53	18.0	28.0
MKTF-24	1/28/2021	ND	20.61	NA	6905.46	6926.07	6928.72	2.65	28.58	18.0	28.0
MKTF-24	2/27/2021	ND	20.32	NA	6905.75	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-24	3/31/2021	ND	20.51	NA	6905.56	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-24	4/26/2021	ND	21.51	NA	6904.56	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-24	5/20/2021	ND	20.56	NA	6905.51	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-24	6/1/2021	ND	20.75	NA	6905.32	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-24	9/8/2021	ND	21.35	NA	6904.72	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-24	12/15/2021	ND	20.90	NA	6905.17	6926.07	6928.72	2.65	28.82	18.0	28.0
MKTF-25	2/26/2020	ND	10.10	NA	6903.25	6913.35	6916.19	2.84	16.59	6.0	16.0
MKTF-25	6/26/2020	ND	10.49	NA	6902.86	6913.35	6916.19	2.84	16.59	6.0	16.0
MKTF-25	9/15/2020	ND	11.06	NA	6902.29	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	11/10/2020	ND	10.91	NA	6902.44	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	12/4/2020	ND	10.78	NA	6902.57	6913.35	6916.19	2.84	17.54	6.0	16.0
MKTF-25	1/28/2021	ND	10.70	NA	6902.65	6913.35	6916.19	2.84	17.54	6.0	16.0
MKTF-25	2/27/2021	ND	10.62	NA	6902.73	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	3/31/2021	ND	10.57	NA	6902.78	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	4/26/2021	ND	11.30	NA	6902.05	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	5/20/2021	ND	10.48	NA	6902.87	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	6/1/2021	ND	10.72	NA	6902.63	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	9/8/2021	ND	11.61	NA	6901.74	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-25	12/16/2021	ND	10.88	NA	6902.47	6913.35	6916.19	2.84	17.25	6.0	16.0
MKTF-26	2/26/2020	5.59	6.35	0.76	6906.20	6912.55	6915.31	2.76	14.39	4.0	14.0
MKTF-26	6/26/2020	5.85	6.74	0.89	6905.81	6912.55	6915.31	2.76	14.39	4.0	14.0
MKTF-26	9/15/2020	6.05	6.80	0.75	6905.75	6912.55	6915.31	2.76	14.09	4.0	14.0
MKTF-26	11/10/2020	5.89	6.60	0.71	6905.95	6912.55	6915.31	2.76	14.09	4.0	14.0
MKTF-26	12/4/2020	4.91	6.63	1.72	6905.92	6912.55	6915.31	2.76	14.40	4.0	14.0
MKTF-26	1/28/2021	6.17	6.44	0.27	6906.11	6912.55	6915.31	2.76	14.40	4.0	14.0
MKTF-26	2/27/2021	6.12	6.29	0.17	6906.26	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-26	3/31/2021	6.24	6.35	0.11	6906.20	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-26	4/26/2021	6.05	6.16	0.11	6906.39	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-26	5/20/2021	6.26	6.38	0.12	6906.17	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-26	6/1/2021	6.34	6.43	0.09	6906.12	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-26	9/9/2021	6.01	6.05	0.04	6906.50	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-26	12/9/2021	6.01	6.20	0.19	6906.35	6912.55	6915.31	2.76	14.14	4.0	14.0
MKTF-27	2/24/2020	ND	1.07	NA	6914.29	6915.36	6917.90	2.54	12.18	2.0	12.0
MKTF-27	6/30/2020	ND	4.16	NA	6911.20	6915.36	6917.90	2.54	12.18	2.0	12.0
MKTF-27	9/15/2020	ND	3.67	NA	6911.69	6915.36	6917.90	2.54	12.18	2.0	12.0
MKTF-27	11/10/2020	ND	4.18	NA	6911.18	6915.36	6917.90	2.54	12.18	2.0	12.0
MKTF-27	12/4/2020	ND	3.93	NA	6911.43	6915.36	6917.90	2.54	12.20	2.0	12.0
MKTF-27	1/28/2021	ND	4.08	NA	6911.28	6915.36	6917.90	2.54	12.20	2.0	12.0
MKTF-27	2/28/2021	ND	2.97	NA	6912.39	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-27	3/31/2021	ND	3.94	NA	6911.42	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-27	4/26/2021	ND	3.64	NA	6911.72	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-27	5/20/2021	ND	3.98	NA	6911.38	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-27	6/1/2021	ND	4.15	NA	6911.21	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-27	9/9/2021	ND	4.46	NA	6910.90	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-27	12/13/2021	ND	4.07	NA	6911.29	6915.36	6917.90	2.54	12.22	2.0	12.0
MKTF-28	2/24/2020	ND	1.68	NA	6916.99	6918.67	6921.52	2.85	13.31	3.0	13.0
MKTF-28	6/30/2020	ND	1.99	NA	6916.68	6918.67	6921.52	2.85	13.31	3.0	13.0
MKTF-28	9/15/2020	ND	1.74	NA	6916.93	6918.67	6921.52	2.85	13.32	3.0	13.0
MKTF-28	11/10/2020	ND	5.96	NA	6912.71	6918.67	6921.52	2.85	13.32	3.0	13.0
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TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
MKTF-30	4/26/2021	ND	13.50	NA	6884.60	6898.10	6900.80	2.70	20.25	10.0	20.0
MKTF-30	5/20/2021	ND	13.69	NA	6884.41	6898.10	6900.80	2.70	20.25	10.0	20.0
MKTF-30	6/1/2021	ND	13.62	NA	6884.48	6898.10	6900.80	2.70	20.25	10.0	20.0
MKTF-30	9/9/2021	ND	14.68	NA	6883.42	6898.10	6900.80	2.70	20.25	10.0	20.0
MKTF-30	12/13/2021	ND	14.51	NA	6883.59	6898.10	6900.80	2.70	20.25	10.0	20.0
MKTF-31	2/24/2020	ND	5.49	NA	6898.77	6904.26	6906.87	2.61	20.20	6.0	21.0
MKTF-31	6/26/2020	ND	5.64	NA	6898.62	6904.26	6906.87	2.61	20.20	6.0	21.0
MKTF-31	9/15/2020	ND	6.14	NA	6898.12	6904.26	6906.87	2.61	16.73	6.0	21.0
MKTF-31	11/10/2020	ND	6.18	NA	6898.08	6904.26	6906.87	2.61	16.73	6.0	21.0
MKTF-31	12/4/2020	ND	6.12	NA	6898.14	6904.26	6906.87	2.61	16.76	6.0	21.0
MKTF-31	1/28/2021	ND	6.01	NA	6898.25	6904.26	6906.87	2.61	10.76	6.0	21.0
MKTF-31	2/27/2021	ND	5.92	NA	6898.34	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-31	3/31/2021	ND	6.00	NA	6898.26	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-31	4/26/2021	ND	5.79	NA	6898.47	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-31	5/20/2021	ND	5.90	NA	6898.36	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-31	6/1/2021	ND	5.82	NA	6898.44	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-31	9/9/2021	ND	6.79	NA	6897.47	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-31	12/15/2021	ND	6.73	NA	6897.53	6904.26	6906.87	2.61	16.75	6.0	21.0
MKTF-32	2/26/2020	ND	11.11	NA	6897.33	6908.44	6911.11	2.67	25.08	9.5	24.5
MKTF-32	6/29/2020	ND	11.58	NA	6896.86	6908.44	6911.11	2.67	25.08	9.5	24.5
MKTF-32	9/14/2020	ND	11.91	NA	6896.53	6908.44	6911.11	2.67	24.79	9.5	24.5
MKTF-32	11/10/2020	ND	11.64	NA	6896.80	6908.44	6911.11	2.67	24.79	9.5	24.5
MKTF-32	12/4/2020	ND	11.58	NA	6896.86	6908.44	6911.11	2.67	25.15	9.5	24.5
MKTF-32	1/28/2021	11.41	11.41	0.00	6897.03	6908.44	6911.11	2.67	25.15	9.5	24.5
MKTF-32	2/27/2021	11.34	11.35	0.01	6897.09	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-32	3/31/2021	ND	11.44	NA	6897.00	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-32	4/26/2021	ND	11.23	NA	6897.21	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-32	5/20/2021	ND	11.48	NA	6896.96	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-32	6/1/2021	ND	11.19	NA	6897.25	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-32	9/9/2021	ND	12.53	NA	6895.91	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-32	11/30/2021	ND	11.81	NA	6896.63	6908.44	6911.11	2.67	25.12	9.5	24.5
MKTF-33	2/27/2020	ND	19.55	NA	6917.04	6936.59	6939.75	3.16	30.04	20.0	30.0
MKTF-33	6/29/2020	ND	18.01	NA	6918.58	6936.59	6939.75	3.16	30.04	20.0	30.0
MKTF-33	9/14/2020	18.45	24.86	6.41	6911.73	6936.59	6939.75	3.16	29.99	20.0	30.0
MKTF-33	11/10/2020	18.49	24.65	6.16	6911.94	6936.59	6939.75	3.16	29.99	20.0	30.0
MKTF-33	12/4/2020	18.53	24.61	6.08	6911.98	6936.59	6939.75	3.16	30.41	20.0	30.0
MKTF-33	1/28/2021	19.42	22.80	3.38	6913.79	6936.59	6939.75	3.16	30.41	20.0	30.0
MKTF-33	2/27/2021	19.84	20.59	0.75	6916.00	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-33	3/31/2021	20.03	20.25	0.22	6916.34	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-33	4/26/2021	21.00	21.61	0.61	6914.98	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-33	5/20/2021	20.05	20.36	0.31	6916.23	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-33	6/1/2021	19.91	20.29	0.38	6916.30	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-33	9/9/2021	20.30	20.49	0.19	6916.10	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-33	12/3/2021	20.13	20.17	0.04	6916.42	6936.59	6939.75	3.16	30.12	20.0	30.0
MKTF-34	2/5/2020	ND	14.85	NA	6927.57	6942.42	6945.35	2.93	24.77	9.5	24.5
MKTF-34	6/29/2020	16.11	16.13	0.02	6926.29	6942.42	6945.35	2.93	24.77	9.5	24.5
MKTF-34	9/14/2020	ND	16.16	NA	6926.26	6942.42	6945.35	2.93	24.83	9.5	24.5
MKTF-34	11/10/2020	ND	16.15	NA	6926.27	6942.42	6945.35	2.93	24.83	9.5	24.5
MKTF-34	12/4/2020	15.98	15.99	0.01	6926.43	6942.42	6945.35	2.93	24.85	9.5	24.5
MKTF-34	1/28/2021	ND	16.46	NA	6925.96	6942.42	6945.35	2.93	24.87	9.5	24.5
MKTF-34	2/28/2021	15.47	15.48	0.01	6926.94	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-34	3/31/2021	ND	17.68	NA	6924.74	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-34	4/26/2021	ND	19.68	NA	6922.74	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-34	5/20/2021	ND	17.67	NA	6924.75	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-34	6/1/2021	ND	17.30	NA	6925.12	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-34	9/9/2021	ND	16.97	NA	6925.45	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-34	11/30/2021	ND	16.67	NA	6925.75	6942.42	6945.35	2.93	24.86	9.5	24.5
MKTF-35	2/5/2020	ND	9.53	NA	6942.37	6951.90	6951.65	-0.25	16.70	6.0	16.0
MKTF-35	6/30/2020	ND	9.50	NA	6942.40	6951.90	6951.65	-0.25	16.70	6.0	16.0
MKTF-35	9/14/2020	ND	8.84	NA	6943.06	6951.90	6951.65	-0.25	16.48	6.0	16.0
MKTF-35	11/10/2020	ND	9.11	NA	6942.79	6951.90	6951.65	-0.25	16.48	6.0	16.0
MKTF-35	12/4/2020	9.27	9.28	0.01	6942.62	6951.90	6951.65	-0.25	16.64	6.0	16.0
MKTF-35	1/28/2021	ND	9.71	NA	6942.19	6951.90	6951.65	-0.25	16.64	6.0	16.0
MKTF-35	2/28/2021	ND	9.42	NA	6942.48	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-35	3/31/2021	ND	9.75	NA	6942.15	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-35	4/26/2021	ND	10.58	NA	6941.32	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-35	5/20/2021	ND	9.85	NA	6942.05	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-35	6/1/2021	ND	9.72	NA	6942.18	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-35	9/9/2021	ND	10.06	NA	6941.84	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-35	12/2/2021	ND	10.40	NA	6941.50	6951.90	6951.65	-0.25	16.80	6.0	16.0
MKTF-36	2/3/2020	8.28	8.83	0.55	6941.68	6950.67	6950.12	-0.39	16.00	5.0	15.0
MKTF-36	6/30/2020	8.43	8.64	0.21	6941.87	6950.67	6950.12	-0.39	16.00	5.0	15.0
MKTF-36	9/14/2020	ND	8.26	NA	6942.25	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	11/10/2020	8.37	8.42	0.05	6942.09	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	12/4/2020	8.49	8.56	0.07	6941.95	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	1/28/2021	8.52	8.57	0.05	6941.94	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	2/28/2021	8.65	8.66	0.01	6941.85	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	3/31/2021	ND	8.75	NA	6941.76	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	4/26/2021	ND	9.30	NA	6941.21	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	5/20/2021	ND	8.69	NA	6941.82	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	6/1/2021	ND	8.50	NA	6942.01	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	9/8/2021	8.83	8.95	0.12	6941.56	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-36	12/9/2021	8.80	8.99	0.19	6941.52	6950.67	6950.12	-0.39	15.97	5.0	15.0
MKTF-37	2/3/2020	9.97	10.09	0.12	6948.98	6959.07	6958.87	-0.20	24.80	4.0	24.0
MKTF-37	6/30/2020	9.81	9.83	0.02	6949.24	6959.07	6958.87	-0.20	24.80	4.0	24.0
MKTF-37	9/14/2020	ND	8.96	NA	6950.11	6959.07	6958.87	-0.20	24.74	4.0	24.0
MKTF-37	11/10/2020	9.56	9.57	0.01	6949.50	6959.07	6958.87	-0.20	24.74	4.0	24.0
MKTF-37	12/4/2020	9.84	9.85	0.01	6949.22	6959.07	6958.87	-0.20	24.81	4.0	24.0
MKTF-37	1/28/2021	9.84	9.85	0.01	6949.22	6959.07	6958.87	-0.20	24.81	4.0	24.0
MKTF-37	2/28/2021	9.85	9.87	0.02	6949.20	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-37	3/31/2021	10.03	10.05	0.02	6949.02	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-37	4/26/2021	10.30	10.33	0.03	6948.74	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-37	5/20/2021	9.99	10.02	0.03	6949.05	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-37	6/1/2021	10.06	10.10	0.04	6948.97	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-37	9/8/2021	10.14	10.31	0.17	6948.76	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-37	12/9/2021	10.50	10.57	0.07	6948.50	6959.07	6958.87	-0.20	24.87	4.0	24.0
MKTF-38	3/4/2020	ND	9.89	NA	6945.28	6955.17	6954.89	-0.28	20.59	5.0	20.

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
MKTF-40	1/28/2021	ND	11.24	NA	6880.11	6891.35	6894.33	2.98	20.70	5.0	20.0
MKTF-40	2/28/2021	ND	11.19	NA	6880.16	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-40	3/31/2021	ND	11.67	NA	6879.68	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-40	4/26/2021	ND	12.67	NA	6878.68	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-40	5/20/2021	ND	11.65	NA	6879.70	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-40	6/1/2021	ND	11.72	NA	6879.63	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-40	9/8/2021	ND	11.10	NA	6880.25	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-40	12/16/2021	ND	11.37	NA	6879.98	6891.35	6894.33	2.98	20.68	5.0	20.0
MKTF-41	2/26/2020	ND	17.62	NA	6873.49	6891.11	6893.64	2.53	37.57	22.0	37.0
MKTF-41	6/29/2020	ND	17.24	NA	6873.87	6891.11	6893.64	2.53	37.57	22.0	37.0
MKTF-41	9/14/2020	ND	18.19	NA	6872.92	6891.11	6893.64	2.53	37.13	22.0	37.0
MKTF-41	11/10/2020	ND	18.48	NA	6872.63	6891.11	6893.64	2.53	37.13	22.0	37.0
MKTF-41	12/4/2020	ND	18.37	NA	6872.74	6891.11	6893.64	2.53	37.27	22.0	37.0
MKTF-41	1/28/2021	ND	18.68	NA	6872.43	6891.11	6893.64	2.53	37.41	22.0	37.0
MKTF-41	2/27/2021	ND	18.58	NA	6872.53	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-41	3/31/2021	ND	18.88	NA	6872.23	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-41	4/26/2021	ND	18.88	NA	6872.23	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-41	5/20/2021	ND	18.87	NA	6872.24	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-41	6/1/2021	ND	18.61	NA	6872.50	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-41	9/9/2021	ND	19.27	NA	6871.84	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-41	11/30/2021	ND	18.82	NA	6872.29	6891.11	6893.64	2.53	37.32	22.0	37.0
MKTF-42	2/26/2020	ND	14.26	NA	6876.16	6890.42	6892.95	2.53	30.62	10.0	30.0
MKTF-42	6/30/2020	ND	13.72	NA	6876.70	6890.42	6892.95	2.53	30.62	10.0	30.0
MKTF-42	9/14/2020	ND	13.82	NA	6876.60	6890.42	6892.95	2.53	30.57	10.0	30.0
MKTF-42	11/10/2020	ND	12.77	NA	6877.65	6890.42	6892.95	2.53	30.57	10.0	30.0
MKTF-42	12/4/2020	ND	13.88	NA	6876.54	6890.42	6892.95	2.53	30.42	10.0	30.0
MKTF-42	1/28/2021	ND	14.32	NA	6876.10	6890.42	6892.95	2.53	30.42	10.0	30.0
MKTF-42	2/27/2021	ND	14.30	NA	6876.12	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-42	3/31/2021	ND	14.64	NA	6875.78	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-42	4/26/2021	ND	16.38	NA	6874.04	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-42	5/20/2021	ND	14.57	NA	6875.85	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-42	6/1/2021	ND	14.54	NA	6875.88	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-42	9/9/2021	ND	14.45	NA	6875.97	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-42	11/30/2021	ND	14.27	NA	6876.15	6890.42	6892.95	2.53	30.71	10.0	30.0
MKTF-43	2/26/2020	ND	3.55	NA	6870.57	6874.12	6876.90	2.78	12.65	2.0	12.0
MKTF-43	6/30/2020	ND	2.72	NA	6871.40	6874.12	6876.90	2.78	12.65	2.0	12.0
MKTF-43	9/14/2020	ND	3.67	NA	6870.45	6874.12	6876.90	2.78	13.44	2.0	12.0
MKTF-43	11/10/2020	ND	4.70	NA	6869.42	6874.12	6876.90	2.78	13.44	2.0	12.0
MKTF-43	12/4/2020	ND	5.34	NA	6868.78	6874.12	6876.90	2.78	14.14	2.0	12.0
MKTF-43	1/28/2021	ND	5.91	NA	6868.21	6874.12	6876.90	2.78	14.14	2.0	12.0
MKTF-43	2/27/2021	ND	5.89	NA	6868.23	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-43	3/31/2021	ND	5.71	NA	6868.41	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-43	4/26/2021	ND	5.88	NA	6868.24	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-43	5/20/2021	ND	5.69	NA	6868.43	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-43	6/1/2021	ND	5.83	NA	6868.29	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-43	9/9/2021	ND	5.17	NA	6868.95	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-43	11/30/2021	ND	6.17	NA	6867.95	6874.12	6876.90	2.78	14.17	2.0	12.0
MKTF-44	10/24/2019	ND	36.00	NA	6831.41	6867.41	6869.95	2.54	48.62	38.0	48.0
MKTF-44	3/4/2020	ND	27.80	NA	6839.61	6867.41	6869.95	2.54	48.61	38.0	48.0
MKTF-44	6/26/2020	ND	30.54	NA	6836.87	6867.41	6869.95	2.54	48.61	38.0	48.0
MKTF-44	9/14/2020	ND	25.46	NA	6841.95	6867.41	6869.95	2.54	49.41	38.0	48.0
MKTF-44	12/4/2020	ND	37.05	NA	6830.36	6867.41	6869.95	2.54	48.85	38.0	48.0
MKTF-44	2/28/2021	ND	35.96	NA	6831.45	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-44	3/31/2021	ND	42.74	NA	6824.67	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-44	4/26/2021	ND	42.79	NA	6824.62	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-44	5/20/2021	ND	42.57	NA	6824.84	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-44	6/1/2021	ND	41.74	NA	6825.67	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-44	9/7/2021	ND	31.71	NA	6835.70	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-44	12/22/2021	ND	36.06	NA	6831.35	6867.41	6869.95	2.54	48.96	38.0	48.0
MKTF-45	2/3/2020	8.64	17.66	9.02	6930.97	6948.63	6949.59	0.96	29.28	--	--
MKTF-45	6/30/2020	10.12	18.12	8.00	6930.51	6948.63	6949.59	0.96	29.28	--	--
MKTF-45	9/14/2020	12.18	17.47	5.29	6931.16	6948.63	6949.59	0.96	36.49	--	--
MKTF-45	11/10/2020	11.98	13.80	1.82	6934.83	6948.63	6949.59	0.96	36.49	--	--
MKTF-45	12/4/2020	11.70	13.55	1.85	6935.08	6948.63	6949.59	0.96	29.49	--	--
MKTF-45	1/28/2021	15.04	15.17	0.13	6933.46	6948.63	6949.59	0.96	29.49	--	--
MKTF-45	2/27/2021	12.59	12.60	0.01	6936.03	6948.63	6949.59	0.96	29.54	--	--
MKTF-45	3/31/2021	14.59	14.61	0.02	6934.02	6948.63	6949.59	0.96	29.54	--	--
MKTF-45	4/26/2021	15.38	15.41	0.03	6933.22	6948.63	6949.59	0.96	29.54	--	--
MKTF-45	5/20/2021	14.54	15.05	0.51	6933.58	6948.63	6949.59	0.96	29.54	--	--
MKTF-45	6/1/2021	15.07	15.09	0.02	6933.54	6948.63	6949.59	0.96	29.54	--	--
MKTF-45	9/9/2021	13.44	13.49	0.05	6935.14	6948.63	6949.59	0.96	29.54	--	--
MKTF-45	12/9/2021	13.35	13.39	0.04	6935.24	6948.63	6949.59	0.96	29.54	--	--
MKTF-46	3/5/2020	ND	8.06	NA	6946.67	6954.73	6957.60	2.87	15.13	3.0	18.0
MKTF-46	6/30/2020	ND	8.21	NA	6946.52	6954.73	6957.60	2.87	15.13	3.0	18.0
MKTF-46	9/14/2020	ND	7.31	NA	6947.42	6954.73	6957.60	2.87	22.42	3.0	18.0
MKTF-46	11/10/2020	ND	7.70	NA	6947.03	6954.73	6957.60	2.87	22.42	3.0	18.0
MKTF-46	12/4/2020	ND	7.90	NA	6946.83	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	1/28/2021	ND	8.45	NA	6946.28	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	2/27/2021	ND	7.95	NA	6946.78	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	3/31/2021	ND	8.03	NA	6946.70	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	4/26/2021	ND	8.26	NA	6946.47	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	5/20/2021	ND	8.16	NA	6946.57	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	6/1/2021	ND	8.22	NA	6946.51	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	9/9/2021	ND	9.29	NA	6945.44	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-46	11/30/2021	ND	9.89	NA	6944.84	6954.73	6957.60	2.87	18.43	3.0	18.0
MKTF-47	3/5/2020	ND	10.31	NA	6949.20	6959.51	6959.09	-0.42	14.42	4.0	14.0
MKTF-47	6/29/2020	ND	9.92	NA	6949.59	6959.51	6959.09	-0.42	14.42	4.0	14.0
MKTF-47	9/15/2020	8.95	8.96	0.01	6950.55	6959.51	6959.09	-0.42	14.73	4.0	14.0
MKTF-47	11/10/2020	ND	9.75	NA	6949.76	6959.51	6959.09	-0.42	14.73	4.0	14.0
MKTF-47	12/4/2020	10.00	10.01	0.01	6949.50	6959.51	6959.09	-0.42	14.73	4.0	14.0
MKTF-47	1/28/2021	ND	9.76	NA	6949.75	6959.51	6959.09	-0.42	14.73	4.0	14.0
MKTF-47	2/28/2021	ND	9.57	NA	6949.94	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-47	3/31/2021	ND	Dry	NA	Dry	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-47	4/26/2021	ND	Dry	NA	Dry	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-47	5/20/2021	ND	Dry	NA	Dry	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-47	6/1/2021	ND	Dry	NA	Dry	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-47	9/9/2021	ND	Dry	NA	Dry	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-47	12/3/2021	11.39	11.43	0.04	6948.08	6959.51	6959.09	-0.42	14.72	4.0	14.0
MKTF-48	3/3/2020	10.17	10.33	0.16	6948.91	6959.24	6961.73	2.49	15.51		

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
MKTF-50	9/15/2020	12.22	12.23	0.01	6927.45	6939.68	6942.82	3.14	19.50	3.0	18.0
MKTF-50	11/10/2020	ND	12.89	ND	6926.79	6939.68	6942.82	3.14	19.50	3.0	18.0
MKTF-50	12/4/2020	ND	13.03	NA	6926.65	6939.68	6942.82	3.14	18.49	3.0	18.0
MKTF-50	1/28/2021	ND	13.29	NA	6926.39	6939.68	6942.82	3.14	17.48	3.0	18.0
MKTF-50	2/28/2021	ND	13.24	NA	6926.44	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	3/31/2021	ND	13.34	NA	6926.34	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	4/26/2021	ND	13.05	NA	6926.63	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	5/20/2021	ND	13.33	NA	6926.35	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	6/1/2021	ND	13.52	NA	6926.16	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	6/16/2021	13.42	13.62	0.20	6926.06	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	9/9/2021	12.26	12.54	0.28	6927.14	6939.68	6942.82	3.14	18.56	3.0	18.0
MKTF-50	12/9/2021	12.30	12.56	0.26	6927.12	6939.68	6942.82	3.14	18.56	3.0	18.0
NAPIS-1	3/4/2020	7.45	7.50	0.05	6906.12	6913.62	6913.86	0.24	13.29	3.7	13.7
NAPIS-1	7/1/2020	7.14	7.18	0.04	6906.44	6913.62	6913.86	0.24	13.29	3.7	13.7
NAPIS-1	9/15/2020	6.46	6.47	0.01	6907.15	6913.62	6913.86	0.24	13.34	3.7	13.7
NAPIS-1	11/10/2020	6.95	6.96	0.01	6906.66	6913.62	6913.86	0.24	13.34	3.7	13.7
NAPIS-1	12/7/2020	ND	7.20	NA	6906.42	6913.62	6913.86	0.24	13.52	3.7	13.7
NAPIS-1	1/28/2021	7.64	7.65	0.01	6905.97	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	2/27/2021	7.66	7.71	0.05	6905.91	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	3/31/2021	ND	7.77	NA	6905.85	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	4/26/2021	ND	7.58	NA	6906.04	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	5/20/2021	ND	8.28	NA	6905.34	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	6/3/2021	ND	7.61	NA	6906.01	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	9/8/2021	6.79	6.80	0.01	6906.82	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-1	12/3/2021	7.02	7.04	0.02	6906.58	6913.62	6913.86	0.24	13.70	3.7	13.7
NAPIS-2	3/3/2020	ND	10.21	NA	6903.19	6913.40	6912.65	-0.75	14.36	4.2	14.2
NAPIS-2	7/1/2020	ND	9.87	NA	6903.53	6913.40	6912.65	-0.75	31.17	4.2	14.2
NAPIS-2	9/15/2020	ND	8.87	NA	6904.53	6913.40	6912.65	-0.75	15.35	4.2	14.2
NAPIS-2	11/10/2020	ND	9.26	NA	6904.14	6913.40	6912.65	-0.75	15.35	4.2	14.2
NAPIS-2	12/7/2020	ND	9.47	NA	6903.93	6913.40	6912.65	-0.75	15.36	4.2	14.2
NAPIS-2	1/28/2021	ND	9.91	NA	6903.49	6913.40	6912.65	-0.75	15.37	4.2	14.2
NAPIS-2	2/28/2021	ND	9.90	NA	6903.50	6913.40	6912.65	-0.75	15.40	4.2	14.2
NAPIS-2	3/31/2021	ND	10.07	NA	6903.33	6913.40	6912.65	-0.75	15.43	4.2	14.2
NAPIS-2	4/26/2021	ND	9.89	NA	6903.51	6913.40	6912.65	-0.75	15.46	4.2	14.2
NAPIS-2	5/20/2021	ND	9.71	NA	6903.69	6913.40	6912.65	-0.75	15.49	4.2	14.2
NAPIS-2	6/1/2021	ND	9.85	NA	6903.55	6913.40	6912.65	-0.75	15.49	4.2	14.2
NAPIS-2	9/8/2021	ND	9.03	NA	6904.37	6913.40	6912.65	-0.75	15.49	4.2	14.2
NAPIS-2	12/13/2021	ND	9.19	NA	6904.21	6913.40	6912.65	-0.75	15.49	4.2	14.2
NAPIS-3	3/3/2020	ND	11.24	NA	6902.14	6913.38	6912.76	-0.62	31.04	25.4	30.4
NAPIS-3	7/1/2020	ND	10.72	NA	6902.66	6913.38	6912.76	-0.62	31.04	25.4	30.4
NAPIS-3	9/15/2020	ND	9.87	NA	6903.51	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	11/10/2020	ND	10.09	NA	6903.29	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	12/7/2020	ND	9.13	NA	6904.25	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	1/28/2021	ND	9.62	NA	6903.76	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	2/28/2021	ND	9.71	NA	6903.67	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	3/31/2021	ND	9.89	NA	6903.49	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	4/26/2021	ND	9.51	NA	6903.87	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	5/20/2021	ND	9.92	NA	6903.46	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	6/3/2021	ND	9.93	NA	6903.45	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	9/8/2021	ND	8.77	NA	6904.61	6913.38	6912.76	-0.62	32.12	25.4	30.4
NAPIS-3	12/13/2021	ND	8.85	NA	6904.53	6913.38	6912.76	-0.62	32.12	25.4	30.4
OAPIS-1	3/3/2020	ND	10.20	NA	6904.17	6914.37	6916.73	2.36	23.64	16.0	26.0
OAPIS-1	7/1/2020	ND	10.24	NA	6904.13	6914.37	6916.73	2.36	23.64	16.0	26.0
OAPIS-1	9/15/2020	ND	9.54	NA	6904.83	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	11/10/2020	ND	9.66	NA	6904.71	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	12/7/2020	ND	9.95	NA	6904.42	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	1/28/2021	ND	10.62	NA	6903.75	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	2/28/2021	ND	10.60	NA	6903.77	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	3/31/2021	ND	11.12	NA	6903.25	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	4/26/2021	ND	10.88	NA	6903.49	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	5/20/2021	ND	11.52	NA	6902.85	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	6/3/2021	ND	10.72	NA	6903.65	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	9/8/2021	ND	9.34	NA	6905.03	6914.37	6916.73	2.36	25.64	16.0	26.0
OAPIS-1	12/13/2021	ND	9.85	NA	6904.52	6914.37	6916.73	2.36	25.64	16.0	26.0
OW-12A	9/8/2021	ND	Dry	NA	NA	NA	NA	NA	35.50	13.0	32.7
OW-12A	12/3/2021	ND	25.55	NA	NA	NA	NA	NA	35.50	13.0	32.7
OW-14	11/1/2019	NA	NA	NA	NA	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	3/2/2020	NA	NA	NA	NA	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	6/30/2020	ND	20.65	NA	6903.90	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	9/14/2020	NA	NA	NA	NA	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	12/7/2020	NA	22.30	NA	6902.25	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	2/27/2021	ND	21.22	NA	6903.33	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	6/2/2021	ND	21.55	NA	6903.00	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	9/23/2021	ND	21.63	NA	6902.92	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-14	12/29/2021	ND	20.70	NA	6903.85	6924.55	6926.65	2.10	44.42	35.0	45.0
OW-29	2/24/2020	ND	13.37	NA	6900.52	6913.89	6917.00	3.11	47.97	37.5	47.5
OW-29	6/30/2020	ND	14.31	NA	6899.58	6913.89	6917.00	3.11	47.97	37.5	47.5
OW-29	9/14/2020	ND	14.46	NA	6899.43	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-29	11/9/2020	ND	14.12	NA	6899.77	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-29	12/7/2020	ND	14.04	NA	6899.85	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-29	2/27/2021	ND	13.73	NA	6900.16	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-29	6/2/2021	ND	14.17	NA	6899.72	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-29	9/23/2021	ND	14.92	NA	6898.97	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-29	12/1/2021	ND	14.54	NA	6899.35	6913.89	6917.00	3.11	47.94	37.5	47.5
OW-30	11/1/2019	ND	NA	NA	NA	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	3/2/2020	NA	NA	NA	NA	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	6/30/2020	ND	19.45	NA	6902.36	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	9/15/2020	ND	NA	NA	NA	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	12/7/2020	ND	19.34	NA	6902.47	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	2/27/2021	ND	19.14	NA	6902.67	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	6/2/2021	ND	19.54	NA	6902.27	6921.81	6924.69	2.88	47.02	37.9	47.9
OW-30	9/23/2021	ND	19.42	NA	6902.39	6921.81	6924.69	2.88	47.33	37.9	47.9
OW-30	12/28/2021	ND	19.12	NA	6902.69	6921.81	6924.69	2.88	47.33	37.9	47.9
OW-50	3/2/2020	ND	12.47	NA	6900.16	6912.63	6914.21	1.58	62.42	48.0	63.0
OW-50	6/30/2020	ND	13.03	NA	6899.60	6912.63	6914.21	1.58	62.42	48.0	63.0
OW-50	9/14/2020	ND	13.53	NA	6899.10	6912.63	6914.21	1.58	37.44	48.0	63.0
OW-50	11/9/2020	ND	13.29	NA	6899.34	6912.63	6914.21	1.58	37.44	48.0	63.0
OW-50	12/7/2020	ND	13.14	NA	6899.49	6912.63	6914.21	1.58	37.44	48.0	63.0
OW-50	2/27/2021	ND	12.74	NA	6899.89	6912.63	6914.21	1.58	62.42	48.0	63.0
OW-50	6/2/2021	ND	13.13	NA	6899.50	6912.6					

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
OW-54	9/23/2021	ND	15.89	NA	6900.38	6916.36	6918.92	2.65	28.41	13.0	28.0
OW-54	12/28/2021	ND	15.40	NA	6900.87	6916.36	6918.92	2.65	28.41	13.0	28.0
OW-55	3/2/2020	ND	14.73	NA	6906.29	6921.01	6923.25	2.23	28.47	13.0	28.0
OW-55	6/30/2020	ND	15.19	NA	6905.83	6921.01	6923.25	2.23	28.47	13.0	28.0
OW-55	9/14/2020	ND	15.73	NA	6905.29	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-55	10/9/2020	ND	15.47	NA	6905.55	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-55	12/7/2020	ND	15.38	NA	6905.64	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-55	2/27/2021	ND	15.16	NA	6905.86	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-55	6/2/2021	ND	15.59	NA	6905.43	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-55	9/23/2021	ND	16.24	NA	6904.78	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-55	12/28/2021	ND	15.87	NA	6905.15	6921.01	6923.25	2.23	22.25	13.0	28.0
OW-56	3/2/2020	ND	10.45	NA	6907.16	6917.79	6920.18	2.57	16.02	6.0	16.0
OW-56	6/30/2020	ND	11.76	NA	6905.85	6917.79	6920.18	2.57	16.02	6.0	16.0
OW-56	9/14/2020	ND	11.79	NA	6905.82	6917.79	6920.18	2.57	16.01	6.0	16.0
OW-56	11/9/2020	ND	11.64	NA	6905.97	6917.79	6920.18	2.57	16.01	6.0	16.0
OW-56	12/7/2020	ND	11.16	NA	6906.45	6917.79	6920.18	2.57	16.01	6.0	16.0
OW-56	2/27/2021	ND	10.51	NA	6907.10	6917.79	6920.18	2.57	16.04	6.0	16.0
OW-56	6/2/2021	ND	11.18	NA	6906.43	6917.79	6920.18	2.57	16.04	6.0	16.0
OW-56	9/23/2021	ND	11.81	NA	6905.80	6917.79	6920.18	2.57	16.04	6.0	16.0
OW-56	12/22/2021	ND	10.78	NA	6906.83	6917.79	6920.18	2.57	16.04	6.0	16.0
OW-57	3/4/2020	ND	17.51	NA	6913.13	6930.64	6933.10	2.46	25.64	15.0	25.0
OW-57	6/30/2020	ND	17.76	NA	6912.88	6930.64	6933.10	2.46	25.64	15.0	25.0
OW-57	9/14/2020	ND	18.04	NA	6912.60	6930.64	6933.10	2.46	25.63	15.0	25.0
OW-57	11/9/2020	ND	18.07	NA	6912.57	6930.64	6933.10	2.46	25.63	15.0	25.0
OW-57	12/7/2020	ND	18.18	NA	6912.46	6930.64	6933.10	2.46	25.93	15.0	25.0
OW-57	1/28/2021	ND	18.27	NA	6912.37	6930.64	6933.10	2.46	25.93	15.0	25.0
OW-57	2/27/2021	ND	18.27	NA	6912.37	6930.64	6933.10	2.46	25.63	15.0	25.0
OW-57	3/31/2021	ND	18.52	NA	6912.12	6930.64	6933.10	2.46	25.33	15.0	25.0
OW-57	4/26/2021	ND	18.61	NA	6912.03	6930.64	6933.10	2.46	25.03	15.0	25.0
OW-57	5/20/2021	ND	17.42	NA	6913.22	6930.64	6933.10	2.46	24.73	15.0	25.0
OW-57	6/2/2021	ND	18.57	NA	6912.07	6930.64	6933.10	2.46	24.73	15.0	25.0
OW-57	9/9/2021	ND	19.24	NA	6911.40	6930.64	6933.10	2.46	24.73	15.0	25.0
OW-57	12/13/2021	ND	19.29	NA	6911.35	6930.64	6933.10	2.46	24.73	15.0	25.0
OW-58	11/18/2019	ND	24.20	NA	6910.51	6934.71	6934.50	-0.21	47.71	38.0	48.0
OW-58	6/30/2020	ND	24.33	NA	6910.38	6934.71	6934.50	-0.21	47.71	38.0	48.0
OW-58	9/14/2020	ND	24.66	NA	6910.05	6934.71	6934.50	-0.21	48.21	38.0	48.0
OW-58	11/9/2020	ND	23.52	NA	6911.19	6934.71	6934.50	-0.21	48.21	38.0	48.0
OW-58	12/8/2020	ND	24.53	NA	6910.18	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	1/28/2021	ND	24.50	NA	6910.21	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	2/28/2021	ND	24.36	NA	6910.35	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	3/31/2021	ND	24.61	NA	6910.10	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	4/26/2021	ND	25.04	NA	6909.67	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	5/20/2021	ND	23.54	NA	6911.17	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	6/2/2021	ND	24.84	NA	6909.87	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	9/9/2021	ND	25.41	NA	6909.30	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58	12/13/2021	ND	25.42	NA	6909.29	6934.71	6934.50	-0.21	48.16	38.0	48.0
OW-58A	3/5/2020	ND	23.23	NA	6909.75	6932.98	6935.88	2.90	33.10	--	--
OW-58A	6/30/2020	ND	23.60	NA	6909.38	6932.98	6935.88	2.90	44.40	--	--
OW-58A	9/15/2020	ND	23.97	NA	6909.01	6932.98	6935.88	2.90	33.10	--	--
OW-58A	11/9/2020	ND	21.41	NA	6911.57	6932.98	6935.88	2.90	34.01	--	--
OW-58A	12/8/2020	ND	23.81	NA	6909.17	6932.98	6935.88	2.90	33.48	--	--
OW-58A	1/28/2021	ND	23.76	NA	6909.22	6932.98	6935.88	2.90	33.48	--	--
OW-58A	2/28/2021	ND	23.61	NA	6909.37	6932.98	6935.88	2.90	33.60	--	--
OW-58A	3/31/2021	ND	23.88	NA	6909.10	6932.98	6935.88	2.90	33.72	--	--
OW-58A	4/26/2021	ND	24.11	NA	6908.87	6932.98	6935.88	2.90	33.84	--	--
OW-58A	5/20/2021	ND	23.41	NA	6909.57	6932.98	6935.88	2.90	33.96	--	--
OW-58A	6/2/2021	ND	23.73	NA	6909.25	6932.98	6935.88	2.90	33.96	--	--
OW-58A	9/9/2021	ND	24.70	NA	6908.28	6932.98	6935.88	2.90	33.96	--	--
OW-58A	12/13/2021	ND	24.65	NA	6908.33	6932.98	6935.88	2.90	33.96	--	--
OW-59	10/15/2019	ND	21.85	NA	6865.62	6887.63	6889.73	2.26	36.24	20.0	35.0
OW-59	3/3/2020	ND	21.27	NA	6866.20	6887.63	6889.73	2.26	36.24	20.0	35.0
OW-59	6/30/2020	ND	21.41	NA	6866.06	6887.63	6889.73	2.26	36.04	20.0	35.0
OW-59	9/14/2020	ND	21.80	NA	6865.67	6887.63	6889.73	2.26	36.26	20.0	35.0
OW-59	12/7/2020	ND	21.65	NA	6865.82	6887.63	6889.73	2.26	36.29	20.0	35.0
OW-59	2/27/2021	ND	21.38	NA	6866.09	6887.63	6889.73	2.26	36.34	20.0	35.0
OW-59	6/2/2021	ND	21.44	NA	6866.03	6887.63	6889.73	2.26	36.34	20.0	35.0
OW-59	9/8/2021	ND	21.74	NA	6865.73	6887.63	6889.73	2.26	36.34	20.0	35.0
OW-59	12/22/2021	ND	21.59	NA	6865.88	6887.63	6889.73	2.26	36.34	20.0	35.0
OW-60	3/3/2020	ND	13.57	NA	6877.37	6891.06	6893.51	2.57	42.93	25.0	45.0
OW-60	6/30/2020	ND	13.93	NA	6877.01	6891.06	6893.51	2.57	42.93	25.0	45.0
OW-60	9/14/2020	ND	14.00	NA	6876.94	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	11/9/2020	ND	13.78	NA	6877.16	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	12/7/2020	ND	13.98	NA	6876.96	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	1/28/2021	ND	13.88	NA	6877.06	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	2/27/2021	ND	13.90	NA	6877.04	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	6/2/2021	ND	14.09	NA	6876.85	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	9/29/2021	ND	15.79	NA	6875.15	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-60	12/1/2021	ND	14.18	NA	6876.76	6891.06	6893.51	2.57	43.13	25.0	45.0
OW-61	3/4/2020	15.69	18.50	2.81	6942.48	6960.91	6963.57	2.59	29.41	8.0	28.0
OW-61	6/29/2020	14.58	15.45	0.87	6945.53	6960.91	6963.57	2.59	29.41	8.0	28.0
OW-61	9/15/2020	14.29	16.81	2.52	6944.17	6960.91	6963.57	2.59	29.26	8.0	28.0
OW-61	11/9/2020	15.63	16.99	1.36	6943.99	6960.91	6963.57	2.59	29.26	8.0	28.0
OW-61	12/8/2020	15.81	17.71	1.90	6943.27	6960.91	6963.57	2.59	28.74	8.0	28.0
OW-61	1/28/2021	16.54	17.19	0.65	6943.79	6960.91	6963.57	2.59	28.22	8.0	28.0
OW-61	2/27/2021	16.30	17.51	1.21	6943.47	6960.91	6963.57	2.59	29.24	8.0	28.0
OW-61	3/31/2021	16.23	18.69	2.46	6942.29	6960.91	6963.57	2.59	30.26	8.0	28.0
OW-61	4/26/2021	16.34	18.84	2.50	6942.14	6960.91	6963.57	2.59	31.28	8.0	28.0
OW-61	5/20/2021	16.52	19.36	2.84	6941.62	6960.91	6963.57	2.59	32.30	8.0	28.0
OW-61	6/2/2021	16.03	18.30	2.27	6942.68	6960.91	6963.57	2.59	32.30	8.0	28.0
OW-61	9/7/2021	17.77	21.19	3.42	6939.79	6960.91	6963.57	2.59	32.30	8.0	28.0
OW-61	12/2/2021	19.10	19.79	0.69	6941.19	6960.91	6963.57	2.59	32.30	8.0	28.0
OW-62	3/10/2020	20.70	21.28	0.58	6913.20	6934.73	6937.36	2.88	28.59	8.0	28.0
OW-62	6/30/2020	20.74	21.03	0.29	6913.45	6934.73	6937.36	2.88	28.59	8.0	28.0
OW-62	9/15/2020	20.74	20.99	0.25	6913.49	6934.73	6937.36	2.88	29.17	8.0	28.0
OW-62	11/9/2020	20.82	21.12	0.30	6913.36	6934.73	6937.36	2.88	29.17	8.0	28.0
OW-62	12/8/2020	20.81	21.10	0.29	6913.38	6934.73	6937.36	2.88	28.78	8.0	28.0
OW-62	1/28/2021	20.87	21.17	0.30	6913.31	6934.73	6937.36	2.88	28.39	8.0	28.0
OW-62	2/27/2021	20.94	21.27	0.33	6913.21	6934.73	6937.36	2.88	28.79	8.0	28.0
OW-62	3/31/2021	20.97	21.28	0.31	6913.20	693					

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
OW-64	6/2/2021	ND	5.73	NA	6938.90	6945.07	6947.40	2.77	24.58	4.0	24.0
OW-64	9/9/2021	ND	5.17	NA	6939.46	6945.07	6947.40	2.77	24.58	4.0	24.0
OW-64	12/28/2021	ND	4.98	NA	6939.65	6945.07	6947.40	2.77	24.58	4.0	24.0
OW-65	3/4/2020	20.95	27.20	6.25	6923.97	6951.62	6954.05	2.88	37.12	17.0	37.0
OW-65	6/29/2020	21.20	28.53	7.33	6922.64	6951.62	6954.05	2.88	37.12	17.0	37.0
OW-65	9/14/2020	21.82	27.88	6.06	6923.29	6951.62	6954.05	2.88	39.92	17.0	37.0
OW-65	11/9/2020	22.17	29.47	7.30	6921.70	6951.62	6954.05	2.88	39.92	17.0	37.0
OW-65	12/8/2020	22.91	29.07	6.16	6922.10	6951.62	6954.05	2.88	39.62	17.0	37.0
OW-65	1/28/2021	23.75	28.87	5.12	6922.30	6951.62	6954.05	2.88	39.62	17.0	37.0
OW-65	2/27/2021	23.53	30.83	7.30	6920.34	6951.62	6954.05	2.88	38.87	17.0	37.0
OW-65	3/31/2021	24.52	31.00	6.48	6920.17	6951.62	6954.05	2.88	38.12	17.0	37.0
OW-65	4/26/2021	25.13	31.07	5.94	6920.10	6951.62	6954.05	2.88	37.37	17.0	37.0
OW-65	5/20/2021	25.28	32.29	7.01	6918.88	6951.62	6954.05	2.88	36.62	17.0	37.0
OW-65	6/2/2021	24.03	29.78	5.75	6921.39	6951.62	6954.05	2.88	36.62	17.0	37.0
OW-65	9/7/2021	25.49	31.62	6.13	6919.55	6951.62	6954.05	2.88	36.62	17.0	37.0
OW-65	12/2/2021	25.22	32.20	6.98	6918.97	6951.62	6954.05	2.88	36.62	17.0	37.0
OW-66	9/2/2021	ND	15.66	NA	6904.14	6919.80	6922.35	2.55	25.28	10.0	25.0
OW-66	12/1/2021	ND	15.30	NA	6904.50	6919.80	6922.35	2.55	25.28	10.0	25.0
OW-67	9/2/2021	ND	9.84	NA	6890.89	6900.73	6903.29	2.56	25.19	10.0	25.0
OW-67	12/22/2021	ND	9.84	NA	6890.89	6900.73	6903.29	2.56	25.19	10.0	25.0
OW-68	9/2/2021	ND	11.39	NA	6877.29	6888.68	6891.51	2.83	25.39	5.0	25.0
OW-68	12/22/2021	ND	11.27	NA	6877.41	6888.68	6891.51	2.83	25.39	5.0	25.0
OW-70	9/8/2021	ND	3.41	NA	NA	NA	NA	NA	47.70	25.0	44.7
OW-70	12/16/2021	ND	31.59	NA	NA	NA	NA	NA	47.70	25.0	44.7
RW-1	3/4/2020	NA	NA	NA	NA	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	6/30/2020	25.05	26.30	1.25	6916.56	6942.86	6946.06	3.20	39.84	25.0	40.0
RW-1	9/19/2020	24.87	27.00	2.13	6915.86	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	11/10/2020	26.30	27.13	0.83	6915.73	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	12/8/2020	26.30	27.13	0.83	6915.73	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	1/28/2021	26.78	27.13	0.35	6915.73	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	2/27/2021	26.55	27.85	1.30	6915.01	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	3/31/2021	26.70	28.81	2.11	6914.05	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	4/26/2021	26.61	28.69	2.08	6914.17	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	5/20/2021	26.85	30.03	3.18	6912.83	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	6/1/2021	27.13	30.22	3.09	6912.64	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	9/9/2021	26.33	27.82	1.49	6915.04	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-1	12/2/2021	26.71	28.78	2.07	6914.08	6942.86	6946.06	3.20	40.25	25.0	40.0
RW-2	3/4/2020	NA	NA	NA	NA	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	6/30/2020	18.53	18.87	0.34	6907.53	6926.40	6928.53	2.13	37.67	26.1	36.1
RW-2	9/19/2020	19.97	20.10	0.13	6906.30	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	11/9/2020	19.96	20.15	0.19	6906.25	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	12/8/2020	20.07	20.25	0.18	6906.15	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	1/28/2021	ND	20.27	NA	6906.13	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	2/27/2021	20.27	20.32	0.05	6906.08	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	3/31/2021	20.57	20.72	0.15	6905.68	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	4/26/2021	20.92	21.06	0.14	6905.34	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	5/20/2021	21.64	21.73	0.09	6904.67	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2	6/1/2021	21.64	21.73	0.09	6904.67	6926.40	6928.53	2.13	37.87	26.1	36.1
RW-2R	9/9/2021	19.09	21.75	2.66	6909.29	6931.04	6934.21	3.17	28.33	11.5	31.5
RW-2R	12/2/2021	19.33	21.72	2.39	6909.32	6931.04	6934.21	3.17	28.33	11.5	31.5
RW-5	3/4/2020	NA	NA	NA	NA	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	6/30/2020	26.61	30.01	3.40	6911.52	6941.53	6943.57	2.04	37.55	29.5	39.5
RW-5	9/19/2020	27.55	30.77	3.22	6910.76	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	11/9/2020	27.82	30.99	3.17	6910.54	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	12/8/2020	31.11	37.47	6.36	6904.06	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	1/28/2021	30.38	31.94	1.56	6909.59	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	2/27/2021	28.98	29.61	0.63	6911.92	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	3/31/2021	28.06	29.55	1.49	6911.98	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	4/26/2021	28.39	29.72	1.33	6911.81	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	5/20/2021	28.72	28.86	0.14	6912.67	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	6/1/2021	29.16	29.82	0.66	6911.71	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	9/9/2021	28.30	31.40	3.10	6910.13	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-5	12/2/2021	28.27	30.64	2.37	6910.89	6941.53	6943.57	2.04	37.47	29.5	39.5
RW-6	3/4/2020	NA	NA	NA	NA	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	6/30/2020	26.82	28.45	1.63	6913.51	6941.96	6944.01	2.05	38.85	28.5	38.5
RW-6	9/19/2020	27.67	30.59	2.92	6911.37	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	11/9/2020	27.93	31.00	3.07	6910.96	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	12/8/2020	28.13	31.26	3.13	6910.70	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	1/28/2021	28.17	31.07	2.90	6910.89	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	2/27/2021	28.40	31.58	3.18	6910.38	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	3/31/2021	29.55	29.65	0.10	6912.31	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	4/26/2021	29.53	29.56	0.03	6912.40	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	5/20/2021	29.56	29.59	0.03	6912.37	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	6/1/2021	30.06	30.19	0.13	6911.77	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	9/9/2021	28.29	31.39	3.10	6910.57	6941.96	6944.01	2.05	38.80	28.5	38.5
RW-6	12/2/2021	28.35	31.10	2.75	6910.86	6941.96	6944.01	2.05	38.80	28.5	38.5
SMW-2	9/11/2017	ND	22.45	NA	6859.18	6881.63	6883.97	2.34	50.46	34.3	54.3
SMW-2	8/15/2018	ND	22.15	NA	6859.48	6881.63	6883.97	2.34	50.46	34.3	54.3
SMW-2	8/19/2019	ND	22.96	NA	6858.67	6881.63	6883.97	2.34	50.46	34.3	54.3
SMW-2	6/30/2020	ND	21.91	NA	6859.72	6881.63	6883.97	2.34	50.46	34.3	54.3
SMW-2	9/14/2020	ND	22.36	NA	6859.27	6881.63	6883.97	2.34	50.77	34.3	54.3
SMW-2	9/29/2021	ND	22.21	NA	6859.42	6881.63	6883.97	2.34	50.77	34.3	54.3
SMW-4	8/15/2018	ND	27.15	NA	6850.48	6877.63	6879.52	1.89	67.79	51.7	71.7
SMW-4	12/6/2018	ND	27.36	NA	6850.27	6877.63	6879.52	1.89	67.79	51.7	71.7
SMW-4	8/13/2019	ND	27.21	NA	6850.42	6877.63	6879.52	1.89	67.79	51.7	71.7
SMW-4	6/30/2020	ND	27.28	NA	6850.35	6877.63	6879.52	1.89	67.79	51.7	71.7
SMW-4	9/14/2020	ND	27.26	NA	6850.37	6877.63	6879.52	1.89	61.01	51.7	71.7
SMW-4	9/28/2021	ND	27.19	NA	6850.44	6877.63	6879.52	1.89	61.01	51.7	71.7
STP1-NW	8/21/2019	ND	20.82	NA	6883.68	6904.50	6904.47	-0.03	50.03	20.0	50.0
STP1-NW	10/22/2019	ND	20.79	NA	6883.71	6904.50	6904.47	-0.03	50.03	20.0	50.0
STP1-NW	3/3/2020	ND	20.30	NA	6884.20	6904.50	6904.47	-0.03	50.03	20.0	50.0
STP1-NW	6/30/2020	ND	20.70	NA	6883.80	6904.50	6904.47	-0.03	50.03	20.0	50.0
STP1-NW	12/8/2020	ND	20.81	NA	6883.69	6904.50	6904.47	-0.03	50.31	20.0	50.0
STP1-NW	1/28/2021	ND	20.79	NA	6883.71	6904.50	6904.47	-0.03	50.59	20.0	50.0
STP1-NW	2/28/2021	ND	20.63	NA	6883.87	6904.50	6904.47	-0.03	49.88	20.0	50.0
STP1-NW	3/31/2021	ND	21.98	NA	6882.52	6904.50	6904.47	-0.03	49.17	20.0	50.0
STP1-NW	4/26/2021	ND	20.84	NA	6883.						

TABLE 4-1. FLUID LEVEL MONITORING (2021 AND 5 PREVIOUS DATA POINTS)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Depth to Product (ft-bgs)	Depth to Water (ft-bgs)	Product Thickness (ft)	Water Elevation (ft-msl)	Ground Surface Elevation (ft-msl)	Measuring Point Elevation (ft-msl)	Well Casing Height (ft)	Total Depth (ft-bgs)	Depth to Top Screen (ft-bgs)	Depth to Bottom Screen (ft-bgs)
STP1-SW	12/9/2021	ND	Dry	NA	Dry	6912.40	6912.38	-0.02	29.18	15.0	30.0
Sonsela Aquifer											
BW-1C	9/8/2016	ND	10.04	NA	6873.13	6883.17	6885.68	2.51	142.78	125.0	135.0
BW-1C	9/13/2017	ND	10.09	NA	6873.08	6883.17	6885.68	2.51	142.78	125.0	135.0
BW-1C	8/15/2018	ND	10.39	NA	6872.78	6883.17	6885.68	2.51	142.78	125.0	135.0
BW-1C	8/14/2019	ND	9.88	NA	6873.29	6883.17	6885.68	2.51	142.78	125.0	135.0
BW-1C	9/14/2020	ND	11.38	NA	6871.79	6883.17	6885.68	2.51	142.78	125.0	135.0
BW-1C	9/28/2021	ND	11.97	NA	6871.20	6883.17	6885.68	2.51	142.78	125.0	135.0
BW-2C	9/8/2016	ND	18.23	NA	6854.67	6872.90	6875.30	2.40	150.44	139.5	149.5
BW-2C	9/13/2017	ND	18.50	NA	6854.40	6872.90	6875.30	2.40	150.44	139.5	149.5
BW-2C	8/15/2018	ND	18.45	NA	6854.45	6872.90	6875.30	2.40	150.44	139.5	149.5
BW-2C	8/14/2019	ND	18.80	NA	6854.10	6872.90	6875.30	2.40	150.44	139.5	149.5
BW-2C	9/14/2020	ND	18.92	NA	6853.98	6872.90	6875.30	2.40	146.70	139.5	149.5
BW-2C	9/28/2021	ND	18.78	NA	6854.12	6872.90	6875.30	2.40	146.70	139.5	149.5
BW-3C	9/8/2016	ND	6.07	NA	6869.65	6875.72	6877.95	2.23	152.32	144.5	154.5
BW-3C	9/13/2017	ND	5.57	NA	6870.15	6875.72	6877.95	2.23	152.32	144.5	154.5
BW-3C	8/15/2018	ND	5.95	NA	6869.77	6875.72	6877.95	2.23	152.32	144.5	154.5
BW-3C	8/14/2019	ND	5.63	NA	6870.09	6875.72	6877.95	2.23	152.32	144.5	154.5
BW-3C	9/14/2020	ND	6.29	NA	6869.43	6875.72	6877.95	2.23	147.97	144.5	154.5
BW-3C	9/28/2021	ND	6.75	NA	6868.97	6875.72	6877.95	2.23	147.97	144.5	154.5
BW-5C	10/16/2019	ND	0.49	NA	6873.35	6874.22	6876.85	3.01	73.34	64.3	74.3
BW-5C	3/5/2020	ND	-0.21	NA	6874.05	6874.22	6876.85	3.01	73.34	64.3	74.3
BW-5C	6/26/2020	ND	0.37	NA	6873.47	6874.22	6876.85	3.01	64.34	64.3	74.3
BW-5C	9/14/2020	ND	1.35	NA	6872.49	6874.22	6876.85	3.01	73.34	64.3	74.3
BW-5C	12/7/2020	ND	1.26	NA	6872.58	6874.22	6876.85	3.01	73.34	64.3	74.3
BW-5C	2/27/2021	ND	1.10	NA	6872.74	6874.22	6876.85	3.01	73.34	64.3	74.3
BW-5C	6/3/2021	ND	1.79	NA	6872.05	6874.22	6876.85	3.01	73.34	64.3	74.3
BW-5C	9/9/2021	ND	2.15	NA	6871.69	6874.22	6876.85	3.01	73.34	64.3	74.3
MW-1	8/15/2018	ND	6.26	NA	6870.37	6876.63	6878.12	1.49	129.34	117.7	127.7
MW-1	12/5/2018	ND	5.87	NA	6870.76	6876.63	6878.12	1.49	129.34	117.7	127.7
MW-1	8/12/2019	ND	5.45	NA	6871.18	6876.63	6878.12	1.49	129.34	117.7	127.7
MW-1	6/30/2020	ND	5.76	NA	6870.87	6876.63	6878.12	1.49	129.34	117.7	127.7
MW-1	9/14/2020	ND	6.23	NA	6870.40	6876.63	6878.12	1.49	133.81	117.7	127.7
MW-1	9/28/2021	ND	7.78	NA	6868.85	6876.63	6878.12	1.49	133.81	117.7	127.7
MW-2	8/15/2018	ND	7.44	NA	6870.95	6878.39	6880.30	1.91	135.57	112.0	122.0
MW-2	12/5/2018	ND	14.72	NA	6863.67	6878.39	6880.30	1.91	135.57	112.0	122.0
MW-2	8/13/2019	ND	7.09	NA	6871.30	6878.39	6880.30	1.91	135.57	112.0	122.0
MW-2	6/30/2020	ND	7.38	NA	6871.01	6878.39	6880.30	1.91	135.57	112.0	122.0
MW-2	9/14/2020	ND	7.83	NA	6870.56	6878.39	6880.30	1.91	136.29	112.0	122.0
MW-2	9/16/2021	ND	8.31	NA	6870.08	6878.39	6880.30	1.91	136.29	112.0	122.0
MW-4	8/15/2018	ND	5.97	NA	6873.92	6879.89	6881.63	1.74	119.98	101.0	121.0
MW-4	12/5/2018	ND	6.09	NA	6873.80	6879.89	6881.63	1.74	119.98	101.0	121.0
MW-4	8/13/2019	ND	5.26	NA	6874.63	6879.89	6881.63	1.74	119.98	101.0	121.0
MW-4	6/30/2020	ND	5.76	NA	6874.13	6879.89	6881.63	1.74	119.98	101.0	121.0
MW-4	9/14/2020	ND	6.26	NA	6873.63	6879.89	6881.63	1.74	124.16	101.0	121.0
MW-4	9/16/2021	ND	3.76	NA	6876.13	6879.89	6881.63	1.74	125.26	101.0	121.0
MW-5	8/15/2018	ND	8.88	NA	6871.32	6880.20	6882.83	2.63	128.20	115.0	125.0
MW-5	12/6/2018	ND	14.17	NA	6866.03	6880.20	6882.83	2.63	128.20	115.0	125.0
MW-5	8/14/2019	ND	8.42	NA	6871.78	6880.20	6882.83	2.63	128.20	115.0	125.0
MW-5	6/30/2020	ND	8.83	NA	6871.37	6880.20	6882.83	2.63	128.20	115.0	125.0
MW-5	9/14/2020	ND	9.36	NA	6870.84	6880.20	6882.83	2.63	130.37	115.0	125.0
MW-5	9/28/2021	ND	9.90	NA	6870.30	6880.20	6882.83	2.63	130.37	115.0	125.0
OW-01	10/16/2019	ND	1.15	NA	6865.17	6866.32	6866.62	0.30	94.25	89.3	99.3
OW-01	3/9/2020	ND	1.40	NA	6864.92	6866.32	6866.62	0.30	94.25	89.3	99.3
OW-01	6/30/2020	ND	1.30	NA	6865.02	6866.32	6866.62	0.30	94.25	89.3	99.3
OW-01	9/15/2020	ND	1.15	NA	6865.17	6866.32	6866.62	0.30	99.09	89.3	99.3
OW-01	12/7/2020	ND	1.45	NA	6864.87	6866.32	6866.62	0.30	99.09	89.3	99.3
OW-01	2/27/2021	ND	1.46	NA	6864.86	6866.32	6866.62	0.30	99.09	89.3	99.3
OW-01	6/1/2021	ND	1.10	NA	6865.22	6866.32	6866.62	0.30	99.09	89.3	99.3
OW-01	9/9/2021	ND	1.48	NA	6864.84	6866.32	6866.62	0.30	99.09	89.3	99.3
OW-01	12/3/2021	ND	1.50	NA	6864.82	6866.32	6866.62	0.30	99.09	89.3	99.3
OW-10	3/4/2020	ND	4.19	NA	6869.48	6873.67	6874.91	1.24	59.09	40.0	60.0
OW-10	6/30/2020	ND	5.51	NA	6868.16	6873.67	6874.91	1.24	59.09	40.0	60.0
OW-10	9/20/2020	ND	6.46	NA	6867.21	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	10/9/2020	ND	6.46	NA	6867.21	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	12/7/2020	ND	6.37	NA	6867.30	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	1/28/2021	ND	6.60	NA	6867.07	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	2/28/2021	ND	6.61	NA	6867.06	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	3/31/2021	ND	6.44	NA	6867.23	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	4/26/2021	ND	6.43	NA	6867.24	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	5/20/2021	ND	6.35	NA	6867.32	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	6/3/2021	ND	6.65	NA	6867.02	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	9/9/2021	ND	7.41	NA	6866.26	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-10	12/3/2021	ND	6.71	NA	6866.96	6873.67	6874.91	1.24	65.06	40.0	60.0
OW-11	9/9/2016	ND	17.33	NA	6904.72	6922.05	6923.51	1.46	64.33	43.0	65.0
OW-11	9/18/2017	ND	16.62	NA	6905.43	6922.05	6923.51	1.46	64.33	43.0	65.0
OW-11	8/15/2018	ND	17.74	NA	6904.31	6922.05	6923.51	1.46	64.33	43.0	65.0
OW-11	8/20/2019	ND	16.24	NA	6905.81	6922.05	6923.51	1.46	64.33	43.0	65.0
OW-11	9/15/2020	ND	17.05	NA	6905.00	6922.05	6923.51	1.46	64.37	43.0	65.0
OW-11	9/9/2021	ND	17.44	NA	6904.61	6922.05	6923.51	1.46	64.33	43.0	65.0
OW-12	9/19/2017	ND	45.62	NA	6893.95	6939.57	6940.69	1.12	127.73	117.8	137.8
OW-12	8/15/2018	ND	45.38	NA	6894.19	6939.57	6940.69	1.12	127.73	117.8	137.8
OW-12	6/30/2020	ND	Dry	NA	Dry	6939.57	6940.69	1.12	127.73	117.8	137.8
OW-12	9/14/2020	ND	45.33	NA	6894.24	6939.57	6940.69	1.12	130.08	117.8	137.8
OW-12	11/9/2020	ND	45.37	NA	6894.20	6939.57	6940.69	1.12	130.08	117.8	137.8
OW-12	1/28/2021	ND	45.08	NA	6894.49	6939.57	6940.69	1.12	130.08	117.8	137.8
OW-12	9/28/2021	ND	45.78	NA	6893.79	6939.57	6940.69	1.12	130.08	117.8	137.8
OW-13	3/2/2020	ND	18.79	NA	6900.16	6918.95	6920.07	1.12	98.03	78.2	98.2
OW-13	6/30/2020	ND	21.04	NA	6897.91	6918.95	6920.07	1.12	98.03	78.2	98.2
OW-13	9/14/2020	ND	19.87	NA	6899.08	6918.95	6920.07	1.12	90.53	78.2	98.2
OW-13	11/9/2020	ND	19.26	NA	6899.69	6918.95	6920.07	1.12	90.53	78.2	98.2
OW-13	12/7/2020	ND	19.12	NA	6899.83	6918.95	6920.07	1.12	90.53	78.2	98.2
OW-13	2/27/2021	ND	19.26	NA	6899.69	6918.95	6920.07	1.12	98.03	78.2	98.2
OW-13	6/2/2021	ND	19.08	NA	6899.87	6918.95	6920.07	1.12	98.03	78.2	98.2
OW-13	9/23/2021	ND	20.26	NA	6898.69	6918.95	6920.07	1.12	98.03	78.2	98.2
OW-13	12/1/2021	ND	19.78	NA	6899.17	6918.95	6920.07	1.12	98.03	78.2	98.2

Abbreviations:
-- - unknown
ft - feet
ft-bgs - feet below ground surface
ft-msl - feet mean sea level
ND - not detected
NA - not applicable

Notes:
* The depth-to-product and depth-to-water numbers were reversed as they were written in the incorrect locations on the field form. The resulting product thickness is consistent with previous events.
A negative depth-to-water measurement denotes an artesian well where the water surface comes into the casing above the ground surface - the negative value represents the distance above ground surface.
A negative well casing height denotes a flush-mount well where the measuring point is below the ground surface.
Around the first quarter of 2019, some well casing heights were remeasured, but the ground surface elevations were not adjusted to reflect the change.
Survey information was not available for OW-12A and OW-70 at the time of fluid level measurements.
For quarterly fluid levels in June 2021, dates were not recorded on field forms; however, they were in the electronic database and collected June

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,1,1,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trichlorobenzene (µg/L)
	Cleanup Levels		5.74	200	10	5	25	7	NA	7	0.0084	70
Deep Monitoring Wells	OW-01	12/11/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	03/03/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	06/10/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	ND(1)	ND(1)	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	ND(1)	ND(1)	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Deep Monitoring Wells	OW-10	03/12/21	ND(1)	ND(1)	ND(2)	ND(1)	0.9 J	0.56 J	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-10	06/10/21	ND(1)	ND(1)	ND(2)	ND(1)	1.1	0.81 J	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	0.63 J	0.44 J	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	0.74 J	0.42 J	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-11	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-11	08/20/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-11	09/20/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-12	09/19/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-12	09/17/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Deep Monitoring Wells	OW-13	03/02/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Deep Monitoring Wells	OW-13	06/09/21	ND(2)	ND(2)	ND(4)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	ND(2)	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	--	--	ND(1)	--	--	--	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	ND(50)	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	ND(20)	ND(20)	ND(20)	ND(100)	ND(20)	ND(20)	ND(20)	ND(20)	ND(100)	ND(20)
Eastern Boundary Wells	OW-29	03/02/21	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Eastern Boundary Wells	OW-29	06/09/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	ND(5)	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	ND(1)	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Eastern Boundary Wells	OW-50	03/02/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Eastern Boundary Wells	OW-50	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Eastern Boundary Wells	OW-50	09/24/21	--	--	--	--	ND(1)	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	--	--	ND(1)	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/09/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Eastern Boundary Wells	OW-52	03/02/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Eastern Boundary Wells	OW-52	06/09/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Eastern Boundary Wells	OW-52	09/24/21	--	--	--	--	ND(1)	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	--	--	ND(1)	--	--	--	--	--
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	--	--	ND(5)	--	--	--	--	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	--	--	ND(5)	--	--	--	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	--	--	ND(50)	--	--	--	--	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	--	--	ND(50)	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/20	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)
Eastern Boundary Wells	OW-56	03/10/21	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Eastern Boundary Wells	OW-56	06/22/21	ND(10)	ND(10)	ND(10)	3.5 J	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Eastern Boundary Wells	OW-56	09/24/21	--	--	--	--	ND(10)	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	--	--	0.62 J	--	--	--	--	--
Eastern Boundary Wells	OW-66	09/17/21	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(1)	ND(1)	ND(2)	ND(1)	0.7 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Eastern Boundary Wells	OW-70	12/22/21	--	--	--	--	0.85 J	--	--	--	--	--
Evaporation Ponds	EP-2	11/21/19	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)
Evaporation Ponds	EP-2	09/16/20	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Evaporation Ponds	EP-2	09/17/20	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ
Evaporation Ponds	EP-2	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-2	06/21/21	ND(2)	ND(2)	0.71 J	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	11/20/19	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)
Evaporation Ponds	EP-3	09/16/20	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Evaporation Ponds	EP-3	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-3	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Evaporation Ponds	EP-4	09/17/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	EP-4	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-4	06/21/21	ND(2)	ND(2)	ND(4)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Evaporation Ponds	EP-5	09/17/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	EP-5	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-5	06/21/21	ND(2)	ND(2)	ND(4)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trimethylbenzene (µg/L)	1,2-Dibromo 3-chloropropane (µg/L)	1,2-Dibromoethane ^A (µg/L)	1,2-Dibromoethane ^B (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,3-Dichloropropane (µg/L)
	Cleanup Levels		56	0.0033	0.05	0.05	600	5	5	60	NA	370
Deep Monitoring Wells	OW-01	12/11/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	03/03/21	ND(1)	ND(2)	ND(1)	ND(0.0095)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	06/10/21	ND(1)	ND(2)	ND(1)	ND(0.0092)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	09/29/21	ND(1)	--	--	ND(0.0094)	--	0.29 J	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	ND(1)	--	--	ND(0.0094)	--	0.4 J	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	03/12/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.47 J	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	06/10/21	ND(1)	ND(2)	ND(1)	ND(0.0093)	ND(1)	0.7 J	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	09/23/21	ND(1)	--	--	ND(0.0094)	--	0.41 J	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	ND(1)	--	--	ND(0.0094)	--	0.52 J	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/18/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	08/20/19	0.31	ND(2)	ND(1)	--	ND(1)	0.38	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/20/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/30/21	ND(1)	--	--	--	--	ND(1)	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/19/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/17/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/30/21	0.13 J	--	--	--	--	0.3 J	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-13	03/02/21	ND(5)	ND(10)	ND(5)	ND(0.0094)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Deep Monitoring Wells	OW-13	06/09/21	ND(2)	ND(4)	ND(2)	ND(0.0093)	ND(2)	1.4 J	ND(2)	ND(2)	ND(2)	ND(2)
Deep Monitoring Wells	OW-13	09/24/21	ND(2)	--	--	ND(0.0094)	--	1 J	--	ND(2)	--	--
Deep Monitoring Wells	OW-13	12/07/21	0.32J/ND(2)U*	--	--	ND(0.0093)	--	1.2 J	--	ND(2)	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	130	--	ND(1)	--	--	0.48 J	--	99	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	ND(50)	--	--	ND(0.0094)	--	ND(50)	--	ND(50)	--	--
Eastern Boundary Wells	OW-14	12/30/21	8.8J/ND(50)U*	--	--	ND(0.0094)	--	ND(50)	--	ND(50)	--	--
Eastern Boundary Wells	OW-29	12/09/20	ND(20)	ND(100)	ND(20)	--	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Eastern Boundary Wells	OW-29	03/02/21	ND(10)	ND(20)	ND(10)	ND(0.0094)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-29	06/09/21	ND(5)	ND(10)	ND(5)	ND(0.0093)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-29	09/24/21	ND(5)	--	--	ND(0.0093)	--	1.5 J	--	ND(5)	--	--
Eastern Boundary Wells	OW-29	12/07/21	ND(5)	--	--	ND(0.0093)	--	2.1 J	--	ND(5)	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	ND(1)	--	--	ND(0.0093)	--	0.35 J	--	ND(1)	--	--
Eastern Boundary Wells	OW-30	12/30/21	0.76J/ND(5)U*	--	--	ND(0.0094)	--	2 J	--	ND(5)	--	--
Eastern Boundary Wells	OW-50	12/09/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	03/02/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.53 J	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	06/09/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.61 J	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	09/24/21	ND(1)	--	--	ND(0.0093)	--	0.41 J	--	ND(1)	--	--
Eastern Boundary Wells	OW-50	12/07/21	ND(1)	--	--	ND(0.0094)	--	0.54 J	--	ND(1)	--	--
Eastern Boundary Wells	OW-52	12/09/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	03/02/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.49 J	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	06/09/21	ND(1)	ND(2)	ND(1)	ND(0.0093)	ND(1)	0.55 J	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	09/24/21	ND(1)	--	--	ND(0.0094)	--	0.38 J	--	ND(1)	--	--
Eastern Boundary Wells	OW-52	12/07/21	ND(1)	--	--	ND(0.0094)	--	0.54 J	--	ND(1)	--	--
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	3.6 J	--	--	ND(0.0092)	--	1.7 J	--	ND(5)	--	--
Eastern Boundary Wells	OW-54	12/29/21	4.2J/ND(5)U*	--	--	ND(0.0093)	--	2.2 J	--	ND(5)	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	140	--	--	ND(0.0093)	--	15 J	--	18 J	--	--
Eastern Boundary Wells	OW-55	12/29/21	240	--	--	ND(0.0093)	--	20 J	--	56	--	--
Eastern Boundary Wells	OW-56	12/23/20	84.7	ND(10)	ND(2)	--	ND(2)	22.9	ND(2)	42.8	ND(2)	ND(2)
Eastern Boundary Wells	OW-56	03/10/21	31	ND(20)	ND(10)	ND(0.0094)	ND(10)	10	ND(10)	26	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	06/22/21	5.3 J	ND(20)	ND(10)	ND(0.0093)	ND(10)	12	ND(10)	17	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	09/24/21	ND(10)	--	--	ND(0.0093)	--	13	--	ND(10)	--	--
Eastern Boundary Wells	OW-56	12/23/21	1.2	--	--	ND(0.0093)	--	14	--	0.49 J	--	--
Eastern Boundary Wells	OW-66	09/17/21	1300 J	ND(20)	ND(10)	--	ND(10)	4.4 J	ND(10)	350 J	ND(10)	ND(10)
Eastern Boundary Wells	OW-66	12/07/21	1200	--	--	ND(0.0094)	--	20 J	--	360	--	--
Eastern Boundary Wells	OW-70	09/17/21	0.19 J	ND(2)	ND(1)	--	ND(1)	13	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-70	12/22/21	0.9J/ND(1)U*	--	ND(1)	--	--	15	--	0.39J/ND(1)U*	--	--
Evaporation Ponds	EP-2	11/21/19	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/16/20	ND(10)	ND(20)	ND(10)	--	ND(10)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/17/20	ND(1) UJ	ND(2) UJ	ND(1) UJ	--	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-2	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-2	06/21/21	ND(2)	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-2	12/15/21	0.29J/ND(2)U*	--	--	--	--	--	--	ND(2)	--	--
Evaporation Ponds	EP-3	11/20/19	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-3	09/16/20	ND(10)	ND(20)	ND(10)	--	ND(10)	ND(0.5)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-3	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-3	06/21/21	0.32 J	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(10)	ND(20)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-4	09/17/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-4	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-4	06/21/21	ND(2)	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(10)	ND(20)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-5	09/17/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-5	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-5	06/21/21	ND(2)	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,4-Dichlorobenzene (µg/L)	2,2-Dichloropropane (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	2-Hexanone (µg/L)	4-Chlorotoluene (µg/L)	4-Methyl-2-Pentanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromobenzene (µg/L)	Bromodichloromethane (µg/L)
	Cleanup Levels		75	NA	5,565	233	38	250	1,243	14,064	5	62	1.34
Deep Monitoring Wells	OW-01	12/11/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Deep Monitoring Wells	OW-01	03/03/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.4J/ND(10)U*	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	06/10/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Deep Monitoring Wells	OW-10	12/11/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Deep Monitoring Wells	OW-10	03/12/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	06/10/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Deep Monitoring Wells	OW-11	09/18/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	5.9	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/18/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	08/20/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	0.48	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/20/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Deep Monitoring Wells	OW-12	09/19/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	1.8	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/19/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.2	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/17/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	29	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	ND(10)	17	--	--
Deep Monitoring Wells	OW-13	12/09/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Deep Monitoring Wells	OW-13	03/02/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	ND(5)	ND(5)	ND(5)
Deep Monitoring Wells	OW-13	06/09/21	ND(2)	ND(4)	ND(20)	ND(2)	ND(20)	ND(2)	ND(20)	ND(20)	ND(2)	ND(2)	ND(2)
Deep Monitoring Wells	OW-13	09/24/21	--	--	ND(20)	--	--	--	--	ND(20)	ND(2)	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	ND(20)	ND(2)	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	ND(10)	--	--	--	--	5.5J/ND(10)U*	120	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	ND(500)	--	--	--	--	ND(500)	30000	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	ND(500)	25000	--	--
Eastern Boundary Wells	OW-29	12/09/20	ND(20)	ND(20)	ND(500)	ND(20)	ND(500)	ND(20)	ND(500)	ND(500)	ND(20)	--	ND(20)
Eastern Boundary Wells	OW-29	03/02/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-29	06/09/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-29	09/24/21	--	--	ND(50)	--	--	--	--	ND(50)	ND(5)	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	ND(50)	ND(5)	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	ND(10)	--	--	--	--	4.3 J	ND(1)	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	ND(50)	ND(5)	--	--
Eastern Boundary Wells	OW-50	12/09/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Eastern Boundary Wells	OW-50	03/02/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	06/09/21	ND(1)	ND(1)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	09/24/21	--	--	ND(10)	--	--	--	--	3.8 J	ND(1)	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	ND(10)	--	--	--	--	ND(10)	ND(1)	--	--
Eastern Boundary Wells	OW-52	12/09/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Eastern Boundary Wells	OW-52	03/02/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	06/09/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	09/24/21	--	--	ND(10)	--	--	--	--	ND(10)	ND(1)	--	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	ND(10)	--	--	--	--	ND(10)	ND(1)	--	--
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	ND(50)	--	--	--	--	ND(50)	17	--	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	ND(50)	--	--	--	--	ND(50)	14	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	ND(500)	--	--	--	--	ND(500)	11000	--	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	ND(500)	--	--	--	--	ND(500)	8900	--	--
Eastern Boundary Wells	OW-56	12/23/20	ND(2)	ND(2)	ND(50)	ND(2)	ND(50)	ND(2)	ND(50)	ND(50)	547	--	ND(2)
Eastern Boundary Wells	OW-56	03/10/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	170	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	06/22/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	73	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	09/24/21	--	--	ND(100)	--	--	--	--	25 J	12	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	ND(10)	--	--	--	--	4.8J/ND(10)U*	3.8	--	--
Eastern Boundary Wells	OW-66	09/17/21	ND(10)	ND(20)	32J/ND(100)U*	ND(10)	ND(100)	ND(10)	ND(100)	32J/ND(100)U*	12000 J	ND(10)	2.1 J
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	ND(500)	14000	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(1)	ND(2)	3.3 J	ND(1)	ND(10)	ND(1)	ND(10)	12	1.6	ND(1)	ND(1)
Eastern Boundary Wells	OW-70	12/22/21	--	--	ND(10)	--	--	--	--	5J/ND(10)U*	10	--	--
Evaporation Ponds	EP-2	11/21/19	ND(10)	ND(20)	46	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	18	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/16/20	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	590	ND(5)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/17/20	ND(1) UJ	ND(2) UJ	3.4 J	ND(1) UJ	ND(10) UJ	ND(1) UJ	ND(10) UJ	2.4 J	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-2	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Evaporation Ponds	EP-2	06/21/21	ND(2)	ND(4)	3.2J/ND(20)U*	ND(2)	ND(20)	ND(2)	ND(20)	ND(20)	0.48 J	ND(2)	ND(2)
Evaporation Ponds	EP-2	12/15/21	--	--	ND(20)	--	--	--	--	10J/ND(20)U*	ND(2)	--	--
Evaporation Ponds	EP-3	11/20/19	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	180	ND(5)	ND(10)	ND(10)
Evaporation Ponds	EP-3	09/16/20	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	500	ND(5)	ND(10)	ND(10)
Evaporation Ponds	EP-3	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Evaporation Ponds	EP-3	06/21/21	ND(2)	ND(4)	4J/ND(20)U*	ND(2)	ND(20)	ND(2)	ND(20)	17J/ND(20)U*	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-4	09/17/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	16/ND(16)U*	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-4	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Evaporation Ponds	EP-4	06/21/21	ND(4)	ND(20)	ND(20)	ND(2)	ND(20)	ND(2)	ND(20)	15J/ND(20)U*	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-5	09/17/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	5.2J/ND(10)U*	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-5	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Evaporation Ponds	EP-5	06/21/21	ND(2)	ND(4)	2.8J/ND(20)U*	ND(2)	ND(20)	ND(2)	ND(20)	14J/ND(20)U*	ND(2)	ND(2)	ND(2)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon Disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Cis-1,3-dichloropropene (µg/L)	Dibromochloromethane (µg/L)	Dibromomethane (µg/L)
Cleanup Levels			32.9	7.54	810	5	77.6	20,857	100	20.32	70	NA	1.68	8
Deep Monitoring Wells	OW-01	12/11/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Deep Monitoring Wells	OW-01	03/03/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	06/10/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Deep Monitoring Wells	OW-10	03/12/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	06/10/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/18/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	08/20/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/20/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/19/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/17/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Deep Monitoring Wells	OW-13	03/02/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Deep Monitoring Wells	OW-13	06/09/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	--	1 J	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	--	50 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	ND(100) UJ	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20) UJ	ND(20)	ND(100)	ND(20)	ND(100)
Eastern Boundary Wells	OW-29	03/02/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-29	06/09/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	--	4.4 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Eastern Boundary Wells	OW-50	03/02/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	06/09/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	09/24/21	--	--	--	--	--	0.47 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	--	--	--	0.74 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/09/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Eastern Boundary Wells	OW-52	03/02/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	06/09/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	09/24/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	--	--	--	7.1 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	--	--	--	ND(10)	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/20	ND(10)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)	ND(10) UJ
Eastern Boundary Wells	OW-56	03/10/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	06/22/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	09/24/21	--	--	--	--	--	4.4 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	--	--	--	2 J	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	09/17/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	28 J	ND(10)	ND(10)	6.2 J	ND(10)
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	1.3J/ND(3)U*	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-70	12/22/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Evaporation Ponds	EP-2	11/21/19	ND(10)	11	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/16/20	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/17/20	ND(1) UJ	ND(3) UJ	ND(10) UJ	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-2	12/21/20	ND(5)	ND(1)	5.75	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-2	06/21/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-2	12/15/21	--	ND(6)	ND(20)	--	--	--	ND(2)	ND(6)	--	--	--	--
Evaporation Ponds	EP-3	11/20/19	ND(10)	ND(30)	29	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-3	09/16/20	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-3	12/21/20	ND(5)	ND(1)	1.54	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-3	06/21/21	ND(6)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(10)	ND(30)	5.8	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-4	09/17/20	ND(1)	ND(3)	2.1 J	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-4	12/21/20	ND(5)	ND(1)	1.06	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-4	06/21/21	ND(2)	ND(6)	1.3 J	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-5	09/17/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-5	12/21/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-5	06/21/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Isopropylbenzene (µg/L)	Methylene Chloride (µg/L)	MTBE (µg/L)	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butylbenzene (µg/L)	Tetrachloroethene (µg/L)
	Cleanup Levels		197	700	1.39	447	5	143	1,000	660	NA	2,000	100	690	5
Deep Monitoring Wells	OW-01	12/11/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	1.91	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	03/03/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	2.3	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	06/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	2.8	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-01	09/29/21	--	ND(1)	--	--	ND(3)	2.8	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	ND(1)	--	--	ND(3)	2.6	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	7.64	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	11	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	06/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	12	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-10	09/23/21	--	ND(1)	--	--	ND(3)	6.5	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	ND(1)	--	--	ND(3)	6.4	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	08/20/19	ND(1)	0.41	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-11	09/30/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/19/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	0.51	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/17/20	ND(1)	1.9	ND(1)	ND(1)	ND(3)	1.5	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-12	09/30/21	--	0.88 J	--	--	--	2.2	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	134	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Deep Monitoring Wells	OW-13	03/02/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)	120	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Deep Monitoring Wells	OW-13	06/09/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	140	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Deep Monitoring Wells	OW-13	09/24/21	--	ND(2)	--	ND(2)	2.5 J	130	ND(6)	ND(2)	--	ND(2)	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	ND(2)	--	--	--	120	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	6.1	--	2.6	ND(3)	1.9 J	ND(1)	0.79 J	15	ND(1)	0.72 J	ND(1)	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	1200	--	19 J	120 J	810	ND(150)	61	--	ND(50)	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	1000	--	--	--	710	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	ND(20) UJ	ND(20)	ND(100)	ND(20)	ND(100)	3350	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Eastern Boundary Wells	OW-29	03/02/21	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	4300	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-29	06/09/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)	3700	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-29	09/24/21	--	ND(5)	--	ND(5)	8.2 J	3700	ND(15)	ND(5)	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	ND(5)	--	--	--	3600	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	ND(1)	--	ND(1)	ND(3)	2000	ND(3)	ND(1)	--	ND(1)	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	ND(5)	--	--	--	1600	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	52	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	03/02/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	53	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	55	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-50	09/24/21	--	ND(1)	--	ND(1)	ND(3)	56	ND(3)	ND(1)	ND(1)	ND(1)	--	ND(1)	--
Eastern Boundary Wells	OW-50	12/07/21	--	ND(1)	--	ND(1)	ND(3)	55	ND(3)	ND(1)	ND(1)	ND(1)	--	ND(1)	--
Eastern Boundary Wells	OW-52	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	2.69	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	03/02/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	3.9	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	3.5 JB	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-52	09/24/21	--	ND(1)	--	ND(1)	ND(3)	2.4	ND(3)	ND(1)	ND(1)	ND(1)	--	ND(1)	--
Eastern Boundary Wells	OW-52	12/07/21	--	ND(1)	--	ND(1)	ND(3)	3.8	ND(3)	ND(1)	ND(1)	ND(1)	--	ND(1)	--
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	10	--	ND(5)	11 J	1700	ND(15)	ND(5)	--	ND(5)	--	ND(5)	--
Eastern Boundary Wells	OW-54	12/29/21	--	12	--	ND(5)	ND(15)	1500	ND(15)	1.6 J	ND(5)	1.1 J	--	ND(5)	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	600	--	20 J	120 J	1300	ND(150)	50 J	ND(50)	ND(50)	--	ND(50)	--
Eastern Boundary Wells	OW-55	12/29/21	--	590	--	25 J	ND(150)	1100	ND(150)	70	ND(50)	7.7 J	--	ND(50)	--
Eastern Boundary Wells	OW-56	12/23/20	ND(2)	76.9	ND(10)	7.02	ND(10)	70.8	ND(2)	4.44	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Eastern Boundary Wells	OW-56	03/10/21	ND(10)	5.6 J	ND(10)	ND(10)	ND(30)	67	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	06/22/21	ND(10)	ND(10)	ND(10)	2.5 J	ND(30)	73	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Eastern Boundary Wells	OW-56	09/24/21	--	ND(10)	--	ND(10)	21 J	44	ND(30)	ND(10)	ND(10)	ND(10)	--	ND(10)	--
Eastern Boundary Wells	OW-56	12/23/21	--	0.75 J	--	1.8	ND(3)	36	ND(3)	0.27 J	ND(1)	0.33 J	--	ND(1)	--
Eastern Boundary Wells	OW-66	09/17/21	ND(10)	720 J	ND(10)	26	ND(30)	680 J	20 J	140 J	4.4 J	5.6 J	1.4 J	ND(10)	ND(10)
Eastern Boundary Wells	OW-66	12/07/21	--	730	--	--	--	640	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(1)	ND(1)	ND(1)	7.3	ND(3)	68	ND(3)	0.46 J	ND(1)	1.6	ND(1)	ND(1)	ND(1)
Eastern Boundary Wells	OW-70	12/22/21	--	0.29 J	--	25	ND(3)	63	1 J	1.6	0.22 J	5.2	--	ND(1)	--
Evaporation Ponds	EP-2	11/21/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/16/20	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-2	09/17/20	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-2	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-2	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	0.85 J	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-2	12/15/21	--	ND(2)	--	ND(2)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	--	--	--
Evaporation Ponds	EP-3	11/20/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-3	09/16/20	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-3	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-3	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	0.83 J	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-4	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-4	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-4	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	0.84 J	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-5	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-5	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-5	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl Chloride (µg/L)	Xylenes, Total (µg/L)
	Cleanup Levels		1,000	100	NA	5	1,137	2	620
Deep Monitoring Wells	OW-01	12/11/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Deep Monitoring Wells	OW-01	03/03/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-01	06/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-01	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Deep Monitoring Wells	OW-01	12/08/21	ND(1)	--	--	--	--	--	ND(1.5)
Deep Monitoring Wells	OW-10	12/11/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Deep Monitoring Wells	OW-10	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-10	06/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-10	09/23/21	ND(1)	--	--	--	--	--	ND(1.5)
Deep Monitoring Wells	OW-10	12/08/21	ND(1)	--	--	--	--	--	ND(1.5)
Deep Monitoring Wells	OW-11	09/18/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-11	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-11	08/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-11	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-11	09/30/21	ND(1)	--	--	--	--	--	ND(1.5)
Deep Monitoring Wells	OW-12	09/19/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-12	09/19/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Deep Monitoring Wells	OW-12	09/17/20	31	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	6.7
Deep Monitoring Wells	OW-12	09/30/21	6.2	--	--	--	--	--	8.1
Deep Monitoring Wells	OW-13	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Deep Monitoring Wells	OW-13	03/02/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(7.5)
Deep Monitoring Wells	OW-13	06/09/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Deep Monitoring Wells	OW-13	09/24/21	ND(2)	--	--	--	--	--	ND(3)
Deep Monitoring Wells	OW-13	12/07/21	0.51 J	--	--	--	--	--	ND(3)
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	67	--	--	--	--	--	980
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	ND(50)	--	--	--	--	--	ND(75)
Eastern Boundary Wells	OW-14	12/30/21	ND(50)	--	--	--	--	--	ND(75)
Eastern Boundary Wells	OW-29	12/09/20	ND(20)	ND(20)	ND(100)	ND(20)	ND(20)	ND(20)	ND(200)
Eastern Boundary Wells	OW-29	03/02/21	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Eastern Boundary Wells	OW-29	06/09/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(7.5)
Eastern Boundary Wells	OW-29	09/24/21	ND(5)	--	--	--	--	--	ND(7.5)
Eastern Boundary Wells	OW-29	12/07/21	ND(5)	--	--	--	--	--	ND(7.5)
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	ND(1)	--	--	--	--	--	ND(1.5)
Eastern Boundary Wells	OW-30	12/30/21	ND(5)	--	--	--	--	--	ND(7.5)
Eastern Boundary Wells	OW-50	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Eastern Boundary Wells	OW-50	03/02/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Eastern Boundary Wells	OW-50	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Eastern Boundary Wells	OW-50	09/24/21	ND(1)	--	--	--	--	--	ND(1.5)
Eastern Boundary Wells	OW-50	12/07/21	ND(1)	--	--	--	--	--	ND(1.5)
Eastern Boundary Wells	OW-52	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Eastern Boundary Wells	OW-52	03/02/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Eastern Boundary Wells	OW-52	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Eastern Boundary Wells	OW-52	09/24/21	ND(1)	--	--	--	--	--	ND(1.5)
Eastern Boundary Wells	OW-52	12/07/21	ND(1)	--	--	--	--	--	ND(1.5)
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	ND(5)	--	--	--	--	--	ND(7.5)
Eastern Boundary Wells	OW-54	12/29/21	ND(5)	--	--	--	--	--	2.1 J
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	160	--	--	--	--	--	300
Eastern Boundary Wells	OW-55	12/29/21	210	--	--	--	--	--	550
Eastern Boundary Wells	OW-56	12/23/20	125	ND(2)	ND(10)	ND(2)	ND(2) UJ	ND(2)	469
Eastern Boundary Wells	OW-56	03/10/21	67	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	220 J
Eastern Boundary Wells	OW-56	06/22/21	2.4J/ND(10)U*	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	25
Eastern Boundary Wells	OW-56	09/24/21	ND(10)	--	--	--	--	--	ND(15)
Eastern Boundary Wells	OW-56	12/23/21	0.22J/ND(1)U*	--	--	--	--	--	3
Eastern Boundary Wells	OW-66	09/17/21	9200 J	2.7 J	6.5 J	ND(10)	ND(10)	ND(10)	6200
Eastern Boundary Wells	OW-66	12/07/21	14000	--	--	--	--	--	7300
Eastern Boundary Wells	OW-70	09/17/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.4
Eastern Boundary Wells	OW-70	12/22/21	0.33J/ND(1)U*	--	--	--	--	--	2.8
Evaporation Ponds	EP-2	11/21/19	9.9	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-2	09/16/20	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-2	09/17/20	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1.5) UJ
Evaporation Ponds	EP-2	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-2	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Evaporation Ponds	EP-2	12/15/21	ND(2)	--	--	--	--	--	ND(3)
Evaporation Ponds	EP-3	11/20/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-3	09/16/20	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-3	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-3	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-4	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-4	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-4	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-5	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-5	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-5	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,1,1,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trichlorobenzene (µg/L)
Cleanup Levels			5.74	200	10	5	25	7	NA	7	0.0084	70
Evaporation Ponds	EP-5	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	04/29/19	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Evaporation Ponds	EP-6	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	EP-6	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-6	06/21/21	ND(2)	ND(2)	ND(4)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-6	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	11/20/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	--	ND(1)
Evaporation Ponds	EP-7	09/17/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	EP-7	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-7	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	--	ND(1)
Evaporation Ponds	EP-8	09/17/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	EP-8	12/22/20	ND(1) UJ	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(5)	ND(1) UJ
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	11/20/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	--	ND(1)
Evaporation Ponds	EP-9	09/17/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	EP-9	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	EP-9	06/21/21	ND(2)	ND(2)	ND(4)	0.53 J+	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-9	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	09/07/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Evaporation Ponds	EP-11	04/29/19	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Evaporation Ponds	EP-11	12/22/20	ND(1) UJ	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(5)	ND(1) UJ
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Evaporation Ponds	EP-12A	11/21/19	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(5)
Evaporation Ponds	EP-12A	12/22/20	ND(1) UJ	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(5)	ND(1) UJ
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(5)
Evaporation Ponds	EP-12B	09/18/20	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(1) UJ	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(5)	ND(1) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(2)	ND(2)	ND(4)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Evaporation Ponds	STP-1 to EP-2	03/10/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-1	12/06/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-1	08/12/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-1	09/22/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-2	12/06/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-2	08/13/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-2	09/18/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-4	12/06/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-4	08/13/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-4	09/18/20	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-5	12/06/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	MW-5	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-5	09/21/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	0.37 J	ND(2)	ND(1)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	SMW-2	09/18/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	SMW-2	08/22/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	SMW-4	12/06/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	3 J	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	ND(10)	--	ND(10)	4.9 J	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(5)	ND(5)	ND(5)	ND(25)	29.1	8.76	ND(5)	ND(5)	ND(25) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(5)	ND(5)	0.97 J	13	2.2 J	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(5)	ND(10)	1.5 J	12	2.7 J	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5)	ND(10)	7.9	110	280	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	0.8 J	--	5.7	74	310	--	--	--	ND(1)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trimethylbenzene (µg/L)	1,2-Dibromo 3-chloropropane (µg/L)	1,2-Dibromoethane ^A (µg/L)	1,2-Dibromoethane ^B (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,3-Dichloropropane (µg/L)
Cleanup Levels			56	0.0033	0.05	0.05	600	5	5	60	NA	370
Evaporation Ponds	EP-5	12/15/21	0.68J/ND(5)U*	--	--	--	--	--	--	ND(5)	--	--
Evaporation Ponds	EP-6	04/29/19	ND(10)	ND(20)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-6	09/17/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-6	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-6	06/21/21	ND(2)	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-6	12/15/21	0.28J/ND(2)U*	--	--	--	--	--	--	ND(2)	--	--
Evaporation Ponds	EP-7	11/20/19	0.55	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	09/17/20	0.35 J	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	06/21/21	1.2 J+	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	0.5	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	09/17/20	0.4 J	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	12/22/20	ND(1)	ND(5) UJ	ND(1) UJ	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	1.8 J	--	--	--	--	--	--	ND(2)	--	--
Evaporation Ponds	EP-9	11/20/19	ND(1)	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	09/17/20	0.4 J	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	06/21/21	1.2 J+	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-9	12/15/21	1.6J/ND(2)U*	--	--	--	--	--	--	ND(2)	--	--
Evaporation Ponds	EP-11	09/07/18	1.2	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Evaporation Ponds	EP-11	04/29/19	ND(10)	ND(20)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-11	12/22/20	ND(1)	ND(5) UJ	ND(1) UJ	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Evaporation Ponds	EP-12A	11/21/19	ND(5)	--	ND(5)	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12A	12/22/20	ND(1)	ND(5) UJ	ND(1) UJ	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(5)	--	ND(5)	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12B	09/18/20	ND(1) UJ	ND(2) UJ	ND(1) UJ	--	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(1)	ND(5) UJ	ND(1) UJ	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(2)	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	03/10/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	09/30/21	ND(2)	--	--	--	--	--	--	ND(2)	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	0.16J/ND(1)U*	--	--	--	--	--	--	ND(1)	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-1	12/06/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-1	08/12/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/22/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-2	12/06/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-2	08/13/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/18/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-4	12/06/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-4	08/13/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	09/18/20	ND(1) UJ	ND(2) UJ	ND(1) UJ	--	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-5	12/06/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	MW-5	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/21/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(1) UJ	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	0.58J/ND(1)U*	ND(2)	ND(1)	--	ND(1)	0.3 J	ND(1)	ND(1) UJ	ND(1)	ND(1)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(1)	ND(2)	ND(1)	--	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	310 J	ND(10)	ND(5)	--	ND(5)	2.4 J	ND(5)	28 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	410	--	ND(10)	--	ND(10)	4.7 J	ND(10)	11	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	25.7	ND(25)	ND(5)	--	ND(5)	34	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	03/10/21	110	ND(10)	ND(5)	0.0073 J	ND(5)	3 J	ND(5)	2.3 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	100	ND(10)	ND(5)	0.0080 J	ND(5)	4 J	ND(5)	1.6 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5) UJ	ND(10)	ND(5)	--	ND(5)	67	ND(5)	ND(5) UJ	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	0.15J/ND(1)U*	--	--	0.35	ND(1)	40	0.38 J	ND(1)	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,4-Dichlorobenzene (µg/L)	2,2-Dichloropropane (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	2-Hexanone (µg/L)	4-Chlorotoluene (µg/L)	4-Methyl-2-Pentanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromobenzene (µg/L)	Bromodichloromethane (µg/L)
Cleanup Levels			75	NA	5,565	233	38	250	1,243	14,064	5	62	1.34
Evaporation Ponds	EP-5	12/15/21	--	--	ND(50)	--	--	--	ND(50)	21J/ND(50)U*	ND(5)	--	--
Evaporation Ponds	EP-6	04/29/19	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-6	09/17/20	ND(1)	ND(2)	1.3J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	3.6J/ND(10)U*	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-6	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Evaporation Ponds	EP-6	06/21/21	ND(2)	ND(4)	ND(20)	ND(2)	ND(20)	ND(2)	ND(20)	ND(20)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-6	12/15/21	--	--	ND(20)	--	--	--	ND(20)	ND(20)	ND(2)	--	--
Evaporation Ponds	EP-7	11/20/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	58	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	09/17/20	ND(1)	ND(2)	6.7J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	58 JB	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	44.6	ND(1)	--	ND(1)
Evaporation Ponds	EP-7	06/21/21	ND(2)	ND(4)	16J/ND(20)U*	ND(2)	ND(20)	ND(2)	ND(20)	3.6 J	31 JB	ND(2)	ND(2)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	45	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	09/17/20	ND(1)	ND(2)	5.8J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	69 JB	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	12/22/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	ND(25)	ND(1)	--	ND(1) UJ
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	13 J	--	--	--	ND(20)	120	ND(2)	--	--
Evaporation Ponds	EP-9	11/20/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	13	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	09/17/20	ND(1)	ND(2)	5.2J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	56 JB	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	12/21/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	42.2	ND(1)	--	ND(1)
Evaporation Ponds	EP-9	06/21/21	ND(2)	ND(4)	18J/ND(20)U*	ND(2)	ND(20)	ND(2)	ND(20)	3.6 J+	37 JB	ND(2)	ND(2)
Evaporation Ponds	EP-9	12/15/21	--	--	16 J	--	--	--	ND(20)	110	ND(2)	--	--
Evaporation Ponds	EP-11	09/07/18	--	ND(2)	48	ND(1)	ND(10)	ND(1)	ND(10)	66	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-11	04/29/19	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-11	12/22/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	36.1	ND(1)	--	ND(1) UJ
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	ND(2)	8.3	ND(1)	ND(10)	ND(1)	1.6	98	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-12A	11/21/19	ND(5)	ND(10)	15	ND(5)	ND(50)	ND(5)	ND(50)	140	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12A	12/22/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	37.4	ND(1)	--	ND(1) UJ
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(5)	ND(10)	17	ND(5)	ND(50)	ND(5)	ND(50)	1.2	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12B	09/18/20	ND(1) UJ	ND(2) UJ	1.8 J	ND(1) UJ	ND(10) UJ	ND(1) UJ	ND(10) UJ	24 J	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	ND(25)	ND(1)	--	ND(1) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(2)	ND(4)	ND(20)	ND(2)	ND(20)	ND(2)	2.3 J	14J/ND(20)U*	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	ND(1)	ND(1)	31	ND(1)	ND(25)	ND(1)	ND(25)	104	ND(1)	--	ND(1)
Evaporation Ponds	STP-1 to EP-2	03/10/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.8 J	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(1)	ND(2)	2.4J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	11/ND(11)U*	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	7.7 J	--	--	--	--	61	3.3	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	ND(10)	--	--	--	--	6.7J/ND(10)U*	ND(1)	--	--
Land Treatment Unit Wells	MW-1	09/13/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	12/06/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	08/12/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/22/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Land Treatment Unit Wells	MW-2	09/13/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	12/06/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	08/13/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/18/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Land Treatment Unit Wells	MW-4	09/13/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	12/06/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	08/13/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	09/18/20	ND(1) UJ	ND(2) UJ	ND(10) UJ	ND(1) UJ	ND(10) UJ	ND(1) UJ	ND(10) UJ	ND(10) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Land Treatment Unit Wells	MW-5	09/17/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	0.99	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	12/06/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/21/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	13 JB	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.7J/ND(10)U*	ND(1) UJ	ND(1)	ND(1)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(1)	ND(2)	2J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	5.2J/ND(10)U*	0.78J/ND(1)U*	ND(1)	ND(1)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	5.9J/ND(10)U*	8.2	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	6.2	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/18/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	6.7	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	0.23	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.8J/ND(10)U*	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.5	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	12/06/18	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(10)	22J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	47J/ND(50)U*	7100 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	6800	--	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(5)	ND(5) UJ	ND(125)	ND(5)	ND(125)	ND(5)	ND(125)	ND(125)	885	--	ND(5)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	1600	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(10)	39J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	1400	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	29 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	11 JB	69	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon Disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Cis-1,3-dichloropropene (µg/L)	Dibromochloromethane (µg/L)	Dibromomethane (µg/L)
Cleanup Levels			32.9	7.54	810	5	77.6	20,857	100	20.32	70	NA	1.68	8
Evaporation Ponds	EP-5	12/15/21	--	ND(15)	ND(50)	--	--	--	ND(5)	3.1 J	--	--	--	--
Evaporation Ponds	EP-6	04/29/19	ND(10)	ND(30)	13	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-6	09/17/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-6	12/21/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-6	06/21/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-6	12/15/21	--	ND(6)	ND(20)	--	--	--	ND(2)	1.5 J	--	--	--	--
Evaporation Ponds	EP-7	11/20/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	0.9	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	09/17/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	1.3 J	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	12/21/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	3.01	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-7	06/21/21	ND(2)	ND(6)	2 J+	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	1.3	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	09/17/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	4.4	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	12/22/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)	2.41	ND(1)	ND(5)	ND(1) UJ	ND(5)
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	4 J	2.9 J	--	--	--	ND(2)	62	--	--	--	--
Evaporation Ponds	EP-9	11/20/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	1.4	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	09/17/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	1.4 J	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	12/21/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.67	ND(1)	ND(5)	ND(1)	ND(5) UJ
Evaporation Ponds	EP-9	06/21/21	ND(2)	ND(6)	1.3 J+	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-9	12/15/21	--	2.2 J	ND(20)	--	--	--	ND(2)	35	--	--	--	--
Evaporation Ponds	EP-11	09/07/18	ND(1)	ND(3)	0.6	ND(1)	ND(1)	ND(2)	ND(1)	31	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-11	04/29/19	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	4.6	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-11	12/22/20	ND(5) UJ	ND(1)	2.27	ND(1)	ND(1) UJ	ND(1)	ND(1)	11.1	ND(1)	ND(5)	ND(1) UJ	ND(5)
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(1)	ND(3)	0.77	ND(1)	ND(1)	ND(2)	ND(1)	1.4	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-12A	11/21/19	ND(5)	ND(15)	32	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12A	12/22/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)	4.2	ND(1)	ND(5)	ND(1) UJ	ND(5)
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(5)	ND(15)	31	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12B	09/18/20	ND(1) UJ	ND(3) UJ	ND(10) UJ	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(5) UJ	ND(1)	1.21	ND(1)	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ	ND(5)
Evaporation Ponds	EP-12B	06/21/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Evaporation Ponds	STP-1 to EP-2	03/10/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	0.82 J	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	ND(6)	ND(20)	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	ND(3)	ND(10)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	12/06/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	08/12/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/22/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	12/06/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	08/13/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/18/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	12/06/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	08/13/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	09/18/20	ND(1) UJ	ND(3) UJ	ND(10) UJ	ND(1) UJ	ND(1) UJ	ND(2) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	12/06/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/21/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	2.3 J	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	ND(30)	--	--	--	ND(10)	--	ND(30)	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(25)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(25)	ND(5)	ND(25)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	2.9 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	3.4 J	ND(5)	3.3 J	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	4.5 J	1.3 J	3.2 J	3.1 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	ND(3)	--	--	ND(1)	ND(2)	0.94 J	ND(3)	2.3	--	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Isopropylbenzene (µg/L)	Methylene Chloride (µg/L)	MTBE (µg/L)	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butylbenzene (µg/L)	Tetrachloroethene (µg/L)
Cleanup Levels			197	700	1.39	447	5	143	1,000	660	NA	2,000	100	690	5
Evaporation Ponds	EP-5	12/15/21	--	ND(5)	--	ND(5)	ND(15)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	--	--	--
Evaporation Ponds	EP-6	04/29/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-6	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-6	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-6	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	0.87 J	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-6	12/15/21	--	ND(2)	--	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	--	--	--
Evaporation Ponds	EP-7	11/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-7	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-8	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ	ND(1)
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	ND(2)	--	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	--	--	--
Evaporation Ponds	EP-9	11/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-9	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-9	12/15/21	--	ND(2)	--	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	--	--	--
Evaporation Ponds	EP-11	09/07/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-11	04/29/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(30)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-11	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ	ND(1)
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	EP-12A	11/21/19	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12A	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ	ND(1)
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Evaporation Ponds	EP-12B	09/18/20	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1) UJ	ND(1) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	03/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	ND(2)	--	--	2.9 J	ND(2)	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	ND(1)	--	--	ND(3)	ND(1)	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(1)	ND(1)	--	ND(1)	0.41	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	12/06/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	08/12/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/22/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-1	09/29/21	--	ND(1)	--	--	ND(3)	ND(1)	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	12/06/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	08/13/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/18/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-2	09/17/21	--	ND(1)	--	--	ND(3)	ND(1)	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	12/06/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	08/13/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-4	09/18/20	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(3) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	ND(1)	--	--	ND(3)	ND(1)	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	12/06/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/21/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	MW-5	09/29/21	--	ND(1)	--	--	ND(3)	ND(1)	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(1)	ND(1) UJ	ND(1)	ND(1)	ND(3)	34 J	ND(3)	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	OW-67	12/23/21	--	ND(1)	--	--	--	40	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(1)	0.85 J	ND(1)	ND(1)	ND(3)	1.3 J	ND(3)	0.3 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	OW-68	12/23/21	--	5.8	--	--	0.83 J	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(1)	ND(1)	--	ND(1)	ND(3)	11	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(1)	ND(1)	--	ND(1)	ND(3)	11	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	12	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	13	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-2	09/30/21	--	ND(1)	--	--	14	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Land Treatment Unit Wells	SMW-4	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	370 J	ND(5)	20	ND(15)	86 J	6.9 J	52 J	2.4 J	3.2 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	670	--	35	ND(30)	90	14 J	81	3.9 J	7.5 J	1.7 J	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(5)	161	ND(25)	8.53	ND(25)	31.7	ND(5)	19.1	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	300	ND(5)	20	ND(15)	26	4.8 J	59	ND(5)	4 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	340	ND(5)	20	2.9 J	29	4.2 J	49	1.2 J	3.4 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5) UJ	ND(5)	ND(5)	ND(15)	45 J	ND(15)	ND(5) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	ND(1)	--	0.91 J	0.85 J	35	ND(3)	0.2 J	ND(1)	0.18 J	ND(1)	ND(1)	ND(1)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl Chloride (µg/L)	Xylenes, Total (µg/L)
Cleanup Levels			1,000	100	NA	5	1,137	2	620
Evaporation Ponds	EP-5	12/15/21	ND(5)	--	--	--	--	--	ND(7.5)
Evaporation Ponds	EP-6	04/29/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-6	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-6	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-6	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Evaporation Ponds	EP-6	12/15/21	ND(2)	--	--	--	--	--	ND(3)
Evaporation Ponds	EP-7	11/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-7	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-7	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-7	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	1.1 J+
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-8	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-8	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10) UJ
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	ND(2)	--	--	--	--	--	ND(3)
Evaporation Ponds	EP-9	11/20/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-9	09/17/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-9	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Evaporation Ponds	EP-9	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	1.2 J+
Evaporation Ponds	EP-9	12/15/21	ND(2)	--	--	--	--	--	1.7 J
Evaporation Ponds	EP-11	09/07/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1
Evaporation Ponds	EP-11	04/29/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(15)
Evaporation Ponds	EP-11	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10) UJ
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	EP-12A	11/21/19	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(7.5)
Evaporation Ponds	EP-12A	12/22/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10) UJ
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(7.5)
Evaporation Ponds	EP-12B	09/18/20	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1.5) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(1) UJ	ND(1) UJ	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1) UJ	ND(10)
Evaporation Ponds	STP-1 to EP-2	03/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5) UJ
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Evaporation Ponds	STP-1 to EP-2	09/30/21	0.46 J	--	--	--	--	--	ND(3)
Evaporation Ponds	STP-1 to EP-2	12/15/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	MW-1	09/13/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-1	12/06/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-1	08/12/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-1	09/22/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-1	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	MW-2	09/13/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-2	12/06/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-2	08/13/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-2	09/18/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-2	09/17/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	MW-4	09/13/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-4	12/06/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-4	08/13/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-4	09/18/20	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1) UJ	ND(1.5) UJ
Land Treatment Unit Wells	MW-4	09/17/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	MW-5	09/17/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-5	12/06/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-5	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-5	09/21/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	MW-5	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	OW-67	09/17/21	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	OW-67	12/23/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	OW-68	09/17/21	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.87 J
Land Treatment Unit Wells	OW-68	12/23/21	1 JB	--	--	--	--	--	4
Land Treatment Unit Wells	SMW-2	09/11/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-2	09/30/21	ND(1)	--	--	--	--	--	ND(1.5)
Land Treatment Unit Wells	SMW-4	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Land Treatment Unit Wells	SMW-4	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	170 J	ND(5)	ND(5)	ND(5)	ND(5)	22	850
Marketing Tank Farm Wells	MKTF-01R	12/22/21	250	--	--	ND(10)	--	34	1000
Marketing Tank Farm Wells	MKTF-02	12/18/20	11.9	ND(5)	ND(25)	ND(5)	ND(5)	24.1	ND(50)
Marketing Tank Farm Wells	MKTF-02	03/10/21	23	ND(5)	ND(5)	ND(5)	ND(5)	15	46 J
Marketing Tank Farm Wells	MKTF-02	06/17/21	25	ND(5)	ND(5)	ND(5)	ND(5)	14	63
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5) UJ	ND(5)	ND(5)	23	ND(5)	1.9 J	ND(7.5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	ND(1)	--	--	15	--	1	ND(1.5)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,1,1,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trichlorobenzene (µg/L)
	Cleanup Levels		5.74	200	10	5	25	7	NA	7	0.0084	70
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	35	45	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	ND(5)	--	ND(5)	54	81	--	--	--	ND(5)
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(25)	ND(25)	ND(25)	ND(125)	40	ND(25)	ND(25)	ND(25)	ND(125) UJ	ND(25)
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(5)	ND(10)	ND(5)	27	2.4 J	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(10)	ND(10)	ND(20)	ND(10)	18	4.7 J	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(10)	ND(10)	ND(20)	ND(10)	24	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	ND(10)	--	ND(10)	17	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	ND(5)	ND(5)	ND(10)	ND(5)	21	1.3 J	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(10)	ND(10)	ND(10)	ND(10)	14	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(10)	ND(10)	ND(20)	ND(10)	11	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	ND(10)	--	3.2 J	11	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)
Marketing Tank Farm Wells	MKTF-16	03/11/21	ND(100)	ND(100)	ND(200)	ND(100)	68 J	ND(100)	ND(100)	ND(100)	ND(200)	ND(100)
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	ND(50)	--	ND(50)	60	ND(50)	--	--	--	ND(50)
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	ND(1)	--	ND(1)	2.6	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	3.3 J	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	ND(10)	--	3 J	5.5 J	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)
Marketing Tank Farm Wells	MKTF-18	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	0.57 J	0.38 J	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-18	06/23/21	ND(5)	ND(5)	4.8 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5) UJ	ND(5) UJ	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	ND(10)	--	2.6 J	ND(10)	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	ND(2)	ND(2)	ND(4)	ND(2)	ND(2)	ND(2) UJ	ND(2)	ND(2)	ND(4)	ND(2)
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(25)	ND(25)	ND(25)	ND(125)	39.3	ND(25)	ND(25)	ND(25)	ND(125) UJ	ND(25)
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(10)	ND(10)	ND(20)	ND(10)	21	5.7 J	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(10)	ND(10)	ND(20)	ND(10)	20	7 J	ND(10)	ND(10)	ND(20)	--
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	ND(10)	--	ND(10)	30	5.1 J	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	ND(10)	--	ND(10)	20	4.6 J	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(5)	ND(5)	ND(5)	ND(25)	91.8	ND(5)	ND(5)	ND(5)	ND(25) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(10)	ND(10)	ND(20)	2.3 J	78	58	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(10)	ND(10)	ND(10)	3 J	90	68	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	ND(10)	--	ND(10)	110	59	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	ND(10)	--	2.4 J	95	55	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5) UJ	ND(1)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(1)	ND(1)	ND(2)	ND(1)	0.52 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(1)	ND(1)	ND(2)	ND(1)	1.2	ND(1)	ND(1)	ND(1)	ND(2)	--
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	ND(1)	--	ND(1)	1.2	0.34 J	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	--
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(1)	ND(1)	ND(2)	ND(1)	0.47 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(1)	ND(1)	ND(2)	ND(1)	0.75 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(1)	ND(1)	ND(2)	ND(1)	0.65 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	ND(1)	--	ND(1)	0.58 J	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(1)	ND(1)	ND(1)	ND(5)	24.1	1.99	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(1)	ND(1)	ND(2)	ND(1)	29	2.5	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(1)	ND(1)	ND(2)	0.35 J	28	1	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(1)	ND(1)	ND(2)	ND(1)	28	1	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	ND(1)	--	0.22 J	33	1.6	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(2)	2.99	ND(2)	ND(10)	42.7	69.2	ND(2)	ND(2)	ND(10) UJ	ND(2)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	2.9 J	ND(10)	ND(5)	36	54	ND(5)	ND(5)	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	3.3 J	ND(10)	2.6 J	41	54	ND(5)	ND(5)	ND(10)	ND(5)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trimethylbenzene (µg/L)	1,2-Dibromo 3-chloropropane (µg/L)	1,2-Dibromoethane ^A (µg/L)	1,2-Dibromoethane ^B (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,3-Dichloropropane (µg/L)
Cleanup Levels			56	0.0033	0.05	0.05	600	5	5	60	NA	370
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	160 J	ND(10)	ND(5)	--	ND(5)	2.3 J	1.3 J	29 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	39	--	ND(5)	--	ND(5)	2.7 J	1.7 J	4.3 J	--	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	1070	ND(125) UJ	ND(25)	--	ND(25)	ND(25)	ND(25)	246	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTF-10	03/10/21	830	ND(10)	ND(5)	--	ND(5)	ND(5)	ND(5)	200	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	950	ND(20)	ND(10)	--	ND(10)	ND(10)	ND(10)	230	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	09/15/21	890	ND(20)	ND(10)	ND(0.0093)	ND(10)	ND(10)	ND(10)	220	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	12/16/21	870	--	ND(10)	--	ND(10)	3.9 J	ND(10)	210	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	--	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	110	ND(10)	ND(5)	--	ND(5)	2 J	ND(5)	23	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	250	ND(20)	ND(10)	--	ND(10)	ND(5)	ND(10)	58	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	09/15/21	250	ND(20)	ND(10)	ND(0.0094)	ND(10)	3 J	ND(10)	58	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	12/16/21	140	--	ND(10)	--	ND(10)	4.3 J	ND(10)	33	--	--
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	236	ND(500)	ND(100)	--	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-16	03/11/21	150	ND(200)	ND(100)	--	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	140	--	--	--	ND(50)	ND(50)	ND(50)	ND(50)	--	--
Marketing Tank Farm Wells	MKTF-16	12/28/21	1.1	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	430 J	ND(10)	ND(5)	--	ND(5)	ND(5)	ND(5)	120 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	370	--	--	--	ND(10)	ND(10)	ND(10)	95	--	--
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(2)	ND(10)	ND(2)	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-18	03/11/21	1.2	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.42 J	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-18	06/23/21	ND(5)	ND(10)	ND(5)	ND(0.0094)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	30 J	ND(10)	ND(5)	--	ND(5)	1.5 J	ND(5)	8.8 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	12/21/21	41	--	--	--	ND(10)	ND(10)	ND(10)	11	--	--
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	16	ND(4)	ND(2)	--	ND(2)	ND(2)	ND(2)	16	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(25)	ND(125)	ND(25)	--	ND(25)	163	ND(25)	ND(25)	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(10)	ND(20)	ND(10)	ND(0.0095)	ND(10)	5.6 J	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(10)	ND(20)	ND(10)	ND(0.0094)	--	6.2 J	ND(10)	ND(10)	--	ND(10)
Marketing Tank Farm Wells	MKTF-24	09/21/21	ND(10)	--	--	ND(0.0093)	ND(10)	4.6 J	ND(10)	ND(10)	--	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	2.2J/ND(10)U*	--	--	ND(0.0094)	ND(10)	5.4	ND(10)	ND(10)	--	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(5)	ND(25)	ND(5)	--	ND(5)	32.1	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(10)	ND(20)	ND(10)	ND(0.0095)	ND(10)	11	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	06/17/21	2.5J/ND(10)U*	ND(20)	ND(10)	ND(0.0093)	ND(10)	12	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	09/21/21	ND(10)	--	--	ND(0.0093)	ND(10)	13	ND(10)	ND(10)	--	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	1.4 J	--	--	ND(0.0094)	ND(10)	12	ND(10)	ND(10)	--	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	--	0.5 J	ND(1)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	12/14/21	ND(1)	--	--	ND(0.0094)	ND(1)	0.55 J	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/14/21	ND(1)	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(1)	ND(2)	ND(1)	ND(0.0093)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/14/21	ND(1)	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	1.22	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(1)	ND(2)	ND(1)	ND(0.0095)	ND(1)	1.4	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	1.3	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	1.2	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/14/21	ND(1)	--	--	ND(0.0093)	ND(1)	1.3	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(2)	ND(10)	ND(2)	--	ND(2)	25.5	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(10)	ND(5)	ND(0.0094)	ND(5)	16	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(10)	ND(5)	0.0036 J	ND(5)	17	ND(5)	ND(5)	ND(5)	ND(5)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,4-Dichlorobenzene (µg/L)	2,2-Dichloropropane (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	2-Hexanone (µg/L)	4-Chlorotoluene (µg/L)	4-Methyl-2-Pentanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromobenzene (µg/L)	Bromodichloromethane (µg/L)
Cleanup Levels			75	NA	5,565	233	38	250	1,243	14,064	5	62	1.34
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(10)	17J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	26J/ND(50)U*	1100 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	ND(5)	--	ND(50)	--	ND(50)	--	ND(50)	ND(50)	190	--	ND(5)
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(25)	ND(25) UJ	ND(625)	ND(25)	ND(625)	ND(25)	ND(625)	ND(625)	4670	--	ND(25)
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	5100	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	5800	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(10)	ND(20)	21J/ND(100)U*	ND(10)	ND(100)	ND(10)	ND(100)	26J/ND(100)U*	3700	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	12/16/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	6000	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	4900	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(10)	ND(20)	71J/ND(100)U*	ND(10)	ND(100)	ND(10)	11 J	ND(100)	6200	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(10)	ND(20)	24J/ND(100)U*	ND(10)	ND(100)	ND(10)	ND(100)	27J/ND(100)U*	7800	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	12/16/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	4300	--	--
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	ND(100)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(2500)	14700	--	ND(100)
Marketing Tank Farm Wells	MKTF-16	03/11/21	ND(100)	ND(200)	ND(1000)	ND(100)	ND(1000)	ND(100)	ND(1000)	ND(1000)	4500	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	ND(50)	--	ND(500)	--	ND(500)	--	ND(500)	ND(500)	4800	--	--
Marketing Tank Farm Wells	MKTF-16	12/28/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	16	--	--
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	ND(5)	ND(10)	11J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	16J/ND(50)U*	1600 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	1500	--	--
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(2)	ND(2)	ND(50)	ND(2)	ND(50)	ND(2)	ND(50)	ND(50)	371	--	ND(2)
Marketing Tank Farm Wells	MKTF-18	03/11/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	560 J	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-18	06/23/21	ND(5)	ND(10)	13J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	720	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	ND(5)	ND(10)	13J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	20J/ND(50)U*	3700 J	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	12/21/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	1900	--	--
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	ND(2)	ND(4)	ND(20)	ND(2)	ND(20)	ND(2)	13 J	37	18 J	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(25)	ND(25) UJ	ND(625)	ND(25)	ND(625)	ND(25)	ND(625)	ND(625)	5020	--	ND(25)
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	4900	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	06/16/21	--	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	5700	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	09/21/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	28J/ND(100)U*	6400	--	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	5400	--	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(5)	ND(5) UJ	ND(125)	ND(5)	ND(125)	ND(5)	ND(125)	211	629	--	ND(5)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	760	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	890	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	09/21/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	760	--	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	ND(10)	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	700	--	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	06/16/21	--	ND(2)	1.9J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	5.4J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	9.8J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	12/14/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	06/16/21	--	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	3J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(1)	ND(2)	2.3J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/14/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(1) UJ	ND(25)	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.6J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(1)	ND(2)	1.9J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/14/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(1)	ND(2)	2.1J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	7J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.6J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/14/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(2)	ND(2) UJ	ND(50)	ND(2)	ND(50)	ND(2)	ND(50)	ND(50)	ND(2)	--	ND(2)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(10)	17J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	1.4J/ND(5)U*	ND(5)	ND(5)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon Disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Cis-1,3-dichloropropene (µg/L)	Dibromochloromethane (µg/L)	Dibromomethane (µg/L)
	Cleanup Levels		32.9	7.54	810	5	77.6	20,857	100	20.32	70	NA	1.68	8
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	1.2 J	2.6 J	18	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	ND(15)	--	--	ND(5)	ND(10)	1.5 J	2.9 J	26	--	--	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(125)	ND(25)	104	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(125)	ND(25)	ND(125) UJ
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	13	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	11	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	4.6 J	ND(30)	9.3 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	ND(30)	--	--	ND(10)	ND(20)	4.1 J	ND(30)	7.2 J	--	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	23	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	19 J	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	2.6 J	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	ND(30)	--	--	ND(10)	ND(20)	2.5 J	ND(30)	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)	ND(500) UJ
Marketing Tank Farm Wells	MKTF-16	03/11/21	ND(100)	ND(300)	ND(1000)	ND(100)	ND(100)	ND(200)	ND(100)	ND(300)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	ND(150)	--	--	ND(50)	21 J	ND(50)	ND(150)	ND(50)	--	--	--
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	0.46J/ND(3)U*	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	ND(30)	--	--	ND(10)	ND(20)	4.9 J	ND(30)	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(10)	ND(2) UJ	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)	ND(10)
Marketing Tank Farm Wells	MKTF-18	03/11/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(2)	ND(1)	ND(1)	ND(3)	1.4	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-18	06/23/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	4.4 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	7.7 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	ND(30)	--	--	ND(10)	ND(20)	ND(10)	ND(30)	5.5 J	--	--	--
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(125)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(125)	ND(25)	ND(25)	ND(125)
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	2.4 J	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	ND(30)	--	--	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	ND(30)	--	--	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(25)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(25)	ND(5)	ND(5)	ND(25)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	18	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	29 J	16	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	ND(30)	--	--	ND(10)	ND(20)	ND(10)	23 J	21	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	ND(30)	--	--	ND(10)	ND(20)	1.8 J	ND(30)	18	--	--	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	0.42 J	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(5)	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	0.49 J	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	0.75J/ND(3)U*	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	1.75	ND(5)	ND(1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	2.5	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	1.5	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	2.2	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	ND(3)	--	--	ND(1)	0.43 J	ND(1)	ND(3)	2.6	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(10)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(10)	ND(2)	ND(2)	ND(10)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	4.9 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	4.8 J	ND(5)	2.1 J	3.8 J	ND(5)	ND(5)	ND(5)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Isopropylbenzene (µg/L)	Methylene Chloride (µg/L)	MTBE (µg/L)	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butylbenzene (µg/L)	Tetrachloroethene (µg/L)
Cleanup Levels			197	700	1.39	447	5	143	1,000	660	NA	2,000	100	690	5
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	200 J	ND(5)	11	ND(15)	1600 J	3.6 J	28 J	2.2 J	1.8 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	33	--	2.4 J	ND(15)	860	1.4 J	3.2 J	1.2 J	1.4 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(25)	1800	ND(125)	70.4	ND(125)	ND(25)	ND(25)	116	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	1500	ND(5)	54	ND(15)	9	18	98	4.3 J	8.5	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(10)	1900	ND(10)	80	ND(30)	12	21 J	130	8.3 J	12	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(10)	1100	ND(10)	71	ND(30)	5.8 J	12 J	130	7.2 J	5.9 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	1700	--	62	ND(30)	8 J	12 J	110	8 J	5.7 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	ND(5)	210	ND(5)	7.4	ND(15)	52	2.6 J	10	ND(5)	3.4 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(10)	450	ND(10)	17	5.1 J	49	6.4 J	31	ND(10)	6.7 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(10)	480	ND(10)	16	ND(30)	41	4 J	32	ND(10)	4.2 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	190	--	7 J	ND(30)	39	ND(30)	9.5 J	ND(10)	3.3 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	ND(100)	1320	ND(500)	ND(100)	ND(100)	279	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-16	03/11/21	ND(100)	550	ND(100)	ND(100)	ND(300)	160	ND(300)	30 J	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	430	--	ND(50)	120 J	170	ND(150)	24 J	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	3.6	ND(1)	ND(3)	4	ND(3)	0.28 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	ND(5)	280 J	ND(5)	18	ND(15)	3900 J	4.9 J	28 J	3.4 J	2.8 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	460	--	30	ND(30)	4300	6.9 J	69	3.6 J	1.4 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(2)	ND(2)	ND(10)	ND(2)	ND(10)	96.7	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-18	03/11/21	ND(1)	1.4	ND(1)	1.7	ND(3)	98	0.97 J	1.7	ND(1)	0.9 J	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-18	06/23/21	ND(5)	1.5J/ND(5)U*	ND(5)	2.1 J	ND(15)	110	1.6 J	1.9 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	ND(5)	39 J	ND(5)	4.3 J	ND(15)	200 J	3.1 J	6.6 J	2.6 J	1.9 J	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	63	--	5.9 J	ND(30)	130	4.1 J	10	3.3 J	3.2 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	ND(2)	6.3	ND(2)	0.44 J	ND(6)	30	ND(6)	0.9 J	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(25)	223	ND(125)	ND(25)	ND(125)	98.9	ND(25)	36	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(10)	180	ND(10)	13	ND(30)	110	5.9 J	23	2.6 J	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(10)	170	--	16	ND(30)	97	5.3 J	22	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	260	--	19	8.1 J	100	6.6 J	33	ND(10)	4.5 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	280	--	22	ND(30)	81	9 J	42	2.4 J	6.8 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(5)	ND(5)	ND(25)	ND(5)	ND(25)	795	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(10)	ND(10)	ND(10)	12	ND(30)	980	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(10)	8.3J/ND(10)U*	ND(10)	22	5 J	640	4.2 J	10	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	ND(10)	--	4.4 J	6.5 J	660	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	ND(10)	--	4.3 J	ND(30)	500	ND(30)	2.2 J	ND(10)	1.7 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	4.4	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	4.1	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(1)	ND(1)	--	ND(1)	ND(3)	7.5	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	5.2 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	ND(1)	--	ND(1)	ND(3)	16	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	0.6 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(1)	ND(1)	--	ND(1)	ND(3)	1.2	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	ND(1)	--	ND(1)	ND(3)	0.63 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	16	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	23	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	21	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	26	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	ND(1)	--	ND(1)	ND(3)	23	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	3.64	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	6	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	3	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	2.8	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	ND(1)	--	ND(1)	ND(3)	4.2	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(2)	ND(2)	ND(10)	ND(2)	ND(10)	247	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(15)	340	ND(15)	ND(5)	ND(5)	ND(5)			

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl Chloride (µg/L)	Xylenes, Total (µg/L)
Cleanup Levels			1,000	100	NA	5	1,137	2	620
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	13 J	ND(5)	ND(5)	2.1 J	ND(5)	ND(5)	250
Marketing Tank Farm Wells	MKTF-04R	12/22/21	2.9J/ND(5)U*	--	--	3.3 J	--	ND(5)	52
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	284	ND(25)	ND(125)	ND(25)	ND(25)	ND(25)	8600
Marketing Tank Farm Wells	MKTF-10	03/10/21	280	ND(5)	ND(5)	ND(5)	ND(5)	10	7000 J
Marketing Tank Farm Wells	MKTF-10	06/23/21	590	ND(10)	ND(10)	ND(10)	ND(10)	12	8400
Marketing Tank Farm Wells	MKTF-10	09/15/21	250	2.7 J	ND(10)	ND(10)	ND(10)	8.1 J	4300
Marketing Tank Farm Wells	MKTF-10	12/16/21	200	--	--	ND(10)	--	12	6700
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	250	ND(5)	ND(5)	ND(5)	ND(5)	29	690 J
Marketing Tank Farm Wells	MKTF-11	06/17/21	360	ND(10)	ND(10)	ND(10)	ND(10)	18	1600
Marketing Tank Farm Wells	MKTF-11	09/15/21	400	ND(10)	ND(10)	ND(10)	ND(10)	16	1700
Marketing Tank Farm Wells	MKTF-11	12/16/21	170	--	--	ND(10)	--	20	910
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	129	ND(100)	ND(500)	ND(100)	ND(100) UJ	ND(100)	ND(1000)
Marketing Tank Farm Wells	MKTF-16	03/11/21	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	40 J	160
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	ND(50)	--	--	ND(50)	--	20 J	27 J
Marketing Tank Farm Wells	MKTF-16	12/28/21	ND(1)	--	ND(1)	--	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	5400 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	2700
Marketing Tank Farm Wells	MKTF-17R	12/21/21	5800	--	--	ND(10)	--	ND(10)	2300
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(2)	ND(2)	ND(10)	ND(2)	ND(2)	ND(2)	ND(20)
Marketing Tank Farm Wells	MKTF-18	03/11/21	1.3	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.1
Marketing Tank Farm Wells	MKTF-18	06/23/21	1.5J/ND(5)U*	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	2.9J/ND(7.5)U*
Marketing Tank Farm Wells	MKTF-18R	09/17/21	1800 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	370 J
Marketing Tank Farm Wells	MKTF-18R	12/21/21	800	--	--	ND(10)	--	ND(10)	310
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	0.41 J	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	4.3
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(25)	ND(25)	ND(125)	ND(25)	ND(25)	33.2	ND(250)
Marketing Tank Farm Wells	MKTF-24	03/09/21	20	ND(10)	ND(10)	ND(10)	ND(10)	31	ND(15)
Marketing Tank Farm Wells	MKTF-24	06/16/21	22	ND(10)	ND(10)	ND(10)	ND(10)	35	ND(15)
Marketing Tank Farm Wells	MKTF-24	09/21/21	27	--	--	ND(10)	--	30	7.6 J
Marketing Tank Farm Wells	MKTF-24	12/16/21	18	--	--	ND(10)	--	36	7.7 J
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(5)	ND(5)	ND(25)	9.7	ND(5)	ND(5)	ND(50)
Marketing Tank Farm Wells	MKTF-25	03/05/21	2.7 J	ND(10)	ND(10)	9.8 J	ND(10)	7.2 J	ND(15)
Marketing Tank Farm Wells	MKTF-25	06/17/21	3.3J/ND(10)U*	ND(10)	ND(10)	10	ND(10)	11	ND(15)
Marketing Tank Farm Wells	MKTF-25	09/21/21	ND(10)	--	--	11	--	8.9 J	ND(15)
Marketing Tank Farm Wells	MKTF-25	12/17/21	2.1 J	--	--	11	--	14	ND(15)
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-27	12/14/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(1)	ND(1)	ND(5)	ND(1) UJ	ND(1)	ND(1)	ND(10)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-28	12/14/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1) UJ	ND(10)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-29	12/14/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(1)	ND(1)	ND(5)	1.11	ND(1)	ND(1) UJ	ND(10)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(1)	ND(1)	ND(1)	1.5	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(1)	ND(1)	ND(1)	1.1	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(1)	ND(1)	ND(1)	1.2	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-30	12/14/21	ND(1)	--	--	1.5	--	0.79 J	ND(1.5)
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(2)	ND(2)	ND(10)	5.37	ND(2)	ND(2)	ND(20)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(5)	ND(5)	5.4	ND(5)	ND(5)	ND(7.5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(5)	ND(5)	5.9	ND(5)	ND(5)	ND(7.5)

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,1,1,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trichlorobenzene (µg/L)
	Cleanup Levels		5.74	200	10	5	25	7	NA	7	0.0084	70
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	1.8 J	ND(10)	1.6 J	33	48	--	--	--	ND(5)
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	2.3 J	--	2.4 J	38	49	--	--	--	ND(5)
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(5)	ND(5)	ND(5)	ND(25)	10.3	17.5	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(2)	ND(2)	ND(4)	0.98 J	12	21	ND(2)	ND(2)	ND(4)	ND(2)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	ND(2)	--	0.45 J	9.7	19	--	--	--	ND(2)
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	ND(2)	--	0.76 J	11	21	--	--	--	ND(2)
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(1)	ND(1)	ND(2)	ND(1)	0.52 J	0.86 J	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	ND(2)	--	ND(2)	0.76 J	1.5 J	--	--	--	ND(2)
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	ND(2)	--	ND(2)	0.99 J	1.7 J	--	--	--	ND(2)
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	ND(10)	--	ND(10)	5.2 J	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	ND(10)	--	ND(10)	5.8 J	ND(10)	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(1)	ND(1)	ND(2)	ND(1)	0.4 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(1)	ND(1)	ND(1) UJ	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5) UJ	ND(1)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(1)	ND(1)	ND(2)	ND(1)	0.88 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(1)	ND(1)	ND(2)	ND(1)	0.92 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	ND(1)	--	ND(1)	0.78 J	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	ND(1)	--	ND(1)	0.84 J	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(1)	ND(1)	ND(5)	ND(5)	3.34	4.91	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(1)	ND(1)	ND(2)	ND(1)	0.61 J	2.7	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(1)	ND(1)	ND(2)	0.67 J	2.5	4.5	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	ND(1)	--	0.52 J	2.7	5.4	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	ND(1)	--	0.68 J	3	5.4	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	2.07	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-42	03/04/21	ND(1)	ND(1)	ND(2)	ND(1)	0.94 J	2.7	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-42	06/15/21	ND(2)	ND(2)	2 J	0.51 J	1.4 J	2 J	ND(2)	ND(2)	ND(4)	ND(2)
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	ND(2)	--	ND(2)	1.1 J	2.5	--	--	--	ND(2)
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	ND(2)	--	ND(2)	1.4 J	3.6	--	--	--	ND(2)
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-43	06/24/21	ND(1)	ND(1)	0.38 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(1)	ND(1)	ND(2)	ND(1)	0.51 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-46	06/16/21	ND(1)	ND(1)	ND(2)	ND(1)	0.53 J	ND(1)	ND(1)	ND(1)	ND(2)	--
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	ND(1)	--	ND(1)	ND(1)	ND(1)	--	--	--	ND(1)
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(20)	ND(20)	ND(40)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(40)	ND(20)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	ND(20)	ND(20)	ND(20)	ND(100)	ND(20)	ND(20)	ND(20)	ND(20)	ND(100)	ND(20)
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ
Production Wells	PW-3	03/12/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Production Wells	PW-3	06/29/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Production Wells	PW-3	09/17/21	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ
Production Wells	PW-4	03/12/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Production Wells	PW-4	06/29/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Production Wells	PW-4	09/17/21	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trimethylbenzene (µg/L)	1,2-Dibromo 3-chloropropane (µg/L)	1,2-Dibromoethane ^A (µg/L)	1,2-Dibromoethane ^B (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,3-Dichloropropane (µg/L)
	Cleanup Levels		56	0.0033	0.05	0.05	600	5	5	60	NA	370
Marketing Tank Farm Wells	MKTF-31	09/16/21	ND(5)	--	--	ND(0.0093)	ND(5)	16 J	ND(5)	ND(5)	--	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	0.67J/ND(5)U*	--	--	ND(0.0094)	ND(5)	17	ND(5)	ND(5)	--	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(5)	ND(25) UJ	ND(5)	--	ND(5)	11.3	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(2)	ND(4)	ND(2)	ND(0.0093)	ND(2)	12	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-32	09/14/21	ND(2)	--	--	ND(0.0092)	ND(2)	9.7	ND(2)	ND(2)	--	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	ND(2)	--	--	ND(0.0094)	ND(2)	10	ND(2)	ND(2)	--	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(1)	ND(2)	ND(1)	ND(0.0093)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-34	09/14/21	ND(2)	--	--	ND(0.0093)	ND(2)	0.63 J	ND(2)	ND(2)	--	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	ND(2)	--	--	ND(0.0093)	ND(2)	0.83 J	ND(2)	ND(2)	--	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	--	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	240	ND(20)	ND(10)	ND(0.0095)	ND(10)	ND(10)	ND(10)	13	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	06/23/21	250	ND(20)	ND(10)	ND(0.0093)	ND(10)	ND(10)	ND(10)	8.6 J	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	09/14/21	260	--	--	NS(0.0094)	ND(10)	ND(10)	ND(10)	2.7 J	--	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	280	--	ND(10)	ND(0.0094)	ND(10)	3.9 J	ND(10)	21	--	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	1400	ND(100)	ND(50)	ND(0.0093)	ND(50)	ND(50)	ND(50)	390	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	--	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	09/22/21	ND(1)	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	0.24J/ND(1)U*	--	--	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	6.59	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(1)	ND(2)	ND(1)	ND(0.0093)	ND(1)	0.49 J	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	09/21/21	ND(1)	--	--	ND(0.0092)	ND(1)	0.33 J	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	0.16 J	--	--	ND(0.0093)	ND(1)	0.43 J	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	1.22	ND(5) UJ	ND(1)	--	ND(1)	2.99	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	03/04/21	2.6	ND(2)	ND(1)	ND(0.0094)	ND(1)	2.4	ND(1)	ND(1)	1.1	ND(1)
Marketing Tank Farm Wells	MKTF-41	06/15/21	1.1	ND(2)	ND(1)	ND(0.0093)	ND(1)	2.4	ND(1)	0.6 J	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	09/14/21	2.8	--	--	ND(0.0094)	ND(1)	2.3	ND(1)	1.2	--	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	4.3	--	--	ND(0.0095)	ND(1)	2.7	ND(1)	1.6	--	--
Marketing Tank Farm Wells	MKTF-42	12/16/20	12.1 J	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	4.15 J	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-42	03/04/21	11	ND(2)	0.34 J	0.18	ND(1)	2.3	ND(1)	ND(1)	3.5	ND(1)
Marketing Tank Farm Wells	MKTF-42	06/15/21	7.4	ND(4)	0.75 J	0.13	ND(2)	2.6	ND(2)	3.1	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-42	09/14/21	23 J	--	--	0.17	ND(2)	2.6	ND(2)	7.4 J	--	--
Marketing Tank Farm Wells	MKTF-42	12/09/21	23	--	--	0.18	ND(2)	3.2	ND(2)	7.1	--	--
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	06/24/21	4.6	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	1.3	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	09/23/21	ND(1)	--	--	--	ND(1)	ND(1)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/08/21	0.16J/ND(1)U*	--	--	ND(0.0092)	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	09/30/21	ND(1)	--	--	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/21	ND(1)	--	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(1)	ND(2)	ND(1)	ND(0.0095)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	06/16/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	--	ND(1)	ND(1)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-46	09/14/21	ND(1)	--	--	ND(0.0093)	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-46	12/09/21	0.14J/ND(1)U*	--	--	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	--	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	637	ND(500)	ND(100)	--	ND(100)	ND(100)	ND(100)	216	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-49	03/09/21	590	ND(40)	ND(20)	--	ND(20)	ND(20)	ND(20)	180	ND(20)	ND(20)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	107	ND(100)	ND(20)	--	ND(20)	ND(20)	ND(20)	38.3	ND(20)	ND(20)
Marketing Tank Farm Wells	MKTF-50	03/09/21	120	ND(20)	ND(10)	--	ND(10)	ND(10)	ND(10)	39	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(1) UJ	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Production Wells	PW-3	03/12/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	06/29/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	09/17/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Production Wells	PW-3	12/16/21	0.33J/ND(1)U*	--	--	--	--	--	--	ND(1)	--	--
Production Wells	PW-4	12/28/20	ND(1) UJ	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Production Wells	PW-4	03/12/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	06/29/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	09/17/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Production Wells	PW-4	12/28/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,4-Dichlorobenzene (µg/L)	2,2-Dichloropropane (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	2-Hexanone (µg/L)	4-Chlorotoluene (µg/L)	4-Methyl-2-Pentanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromobenzene (µg/L)	Bromodichloromethane (µg/L)
Cleanup Levels			75	NA	5,565	233	38	250	1,243	14,064	5	62	1.34
Marketing Tank Farm Wells	MKTF-31	09/16/21	ND(5)	--	ND(50)	--	ND(50)	--	ND(50)	18J/ND(50)U*	ND(5)	--	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	ND(5)	--	ND(50)	--	ND(50)	--	ND(50)	ND(50)	1.3 J	--	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(5)	ND(5) UJ	ND(125)	ND(5)	ND(125)	ND(5)	ND(125)	ND(125)	ND(5)	--	ND(5)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(2)	ND(4)	9.8J/ND(20)U*	ND(2)	ND(20)	ND(2)	ND(20)	5.5J/ND(20)U*	0.5 J	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-32	09/14/21	ND(2)	--	ND(20)	--	ND(20)	--	ND(20)	ND(20)	ND(2)	--	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	ND(2)	--	ND(20)	--	ND(20)	--	ND(20)	ND(20)	ND(2)	--	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	4.2	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-34	09/14/21	ND(2)	--	4.6 J	--	ND(20)	--	ND(20)	9.3J/ND(20)U*	3.2	--	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	0.5 J	--	ND(20)	--	ND(20)	--	ND(20)	ND(20)	7.6	--	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	3400 J	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	06/23/21	4.3J/ND(10)U*	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	5400	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	09/14/21	2.9 J	--	ND(100)	--	ND(100)	--	ND(100)	25J/ND(100)U*	7000	--	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	3.5 J	--	ND(100)	--	ND(100)	--	ND(100)	ND(100)	9600	--	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(100)	ND(100)	250J/ND(500)U*	ND(50)	ND(500)	--	ND(500)	ND(500)	14000	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	0.53J/ND(1)U*	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	09/22/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	0.29 J+	--	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	0.95 J	--	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	14.4	--	ND(1)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25) UJ	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(1)	ND(2)	1.2J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	3.9J/ND(10)U*	0.37J/ND(1)U*	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	09/21/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.6J/ND(10)U*	0.35 J	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(1)	ND(2)	1.3J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	0.33 J	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	09/14/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	0.24 J	--	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	0.37 J	--	--
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	27.1	14.2 J	--	ND(1)
Marketing Tank Farm Wells	MKTF-42	03/04/21	ND(1)	ND(2)	3.2 J	ND(1)	ND(10)	2.5 J	2.5 J	6.9J/ND(10)U*	16	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-42	06/15/21	ND(2)	ND(4)	8.2J/ND(20)U*	ND(2)	ND(20)	ND(2)	2.7 J	13J/ND(20)U*	14	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-42	09/14/21	ND(2)	--	4.1 J	--	ND(20)	2 J	2 J	8.5J/ND(20)U*	26	--	--
Marketing Tank Farm Wells	MKTF-42	12/09/21	ND(2)	--	ND(20)	--	ND(20)	--	2.1 J	ND(20)	23	--	--
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	06/24/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(1)	1.1 J	4.2J/ND(10)U*	0.24J/ND(1)U*	ND(1)
Marketing Tank Farm Wells	MKTF-43	09/23/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	5.8J/ND(10)U*	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-43	12/08/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.8J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	09/30/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/21	ND(1)	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	2.4J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	06/16/21	--	ND(2)	1.5J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	3.5J/ND(10)U*	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	09/14/21	0.22 J	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	ND(1)	--	--
Marketing Tank Farm Wells	MKTF-46	12/09/21	1.1	--	ND(10)	--	ND(10)	--	ND(10)	ND(10)	0.23 J	--	--
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	0.25 J
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	ND(100)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(2500)	21800	--	ND(100)
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(20)	ND(40)	ND(200)	ND(20)	ND(200)	ND(20)	ND(200)	ND(200)	18000	ND(20)	ND(20)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	ND(20)	ND(20)	ND(500)	ND(20)	ND(500)	ND(20)	ND(500)	ND(500)	5970	--	ND(20)
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(10)	ND(20)	ND(100)	ND(10)	ND(100)	ND(10)	ND(100)	ND(100)	1400	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	ND(25)	ND(1)	--	ND(1)
Production Wells	PW-3	03/12/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	06/29/21	ND(1)	ND(2)	2.2J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	10/ND(10)U*	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	09/17/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	--	--	ND(10)	0.34 J	--	--
Production Wells	PW-4	12/28/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	ND(25)	ND(1)	--	ND(1)
Production Wells	PW-4	03/12/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	06/29/21	ND(1)	ND(2)	2.6J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	13/ND(13)U*	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	09/17/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon Disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Cis-1,3-dichloropropene (µg/L)	Dibromochloromethane (µg/L)	Dibromomethane (µg/L)
	Cleanup Levels		32.9	7.54	810	5	77.6	20,857	100	20.32	70	NA	1.68	8
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	ND(15)	--	--	ND(5)	2.7 J	ND(5)	4.2J/ND(15)U*	2.4 J	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	ND(15)	--	--	ND(5)	2.1 J	ND(5)	3.2 J	3.2 J	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(25) UJ	ND(5) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5) UJ	ND(5)	ND(25)	ND(5) UJ	ND(25)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	2.2	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	ND(6)	--	--	ND(2)	ND(4)	ND(2)	1 J	2.4	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	ND(6)	--	--	ND(2)	ND(4)	ND(2)	0.95J/ND(6)U*	2.7	--	--	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(2)	ND(1)	ND(3)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	ND(6)	--	--	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	--	--	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	ND(6)	--	--	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	--	--	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	ND(30)	--	--	ND(10)	38	3.4 J	62	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	ND(30)	--	--	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	--	--	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(50)	ND(150)	ND(500)	ND(50)	ND(50)	ND(100)	ND(50)	ND(150)	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	0.51 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(2)	ND(2)	0.53 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	ND(3)	--	--	ND(1)	ND(2)	0.21 J	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(5)	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	0.25 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-42	03/04/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-42	06/15/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	ND(6)	--	--	ND(2)	ND(4)	ND(2)	0.87 J	ND(2)	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	ND(6)	--	--	ND(2)	ND(4)	ND(2)	0.88J/ND(6)U*	ND(2)	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	0.38 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	06/24/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	0.29 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	0.55J/ND(3)U*	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(5)	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	06/16/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	0.29 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	ND(3)	--	--	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	ND(3)	--	--	0.2 J	ND(2)	ND(1)	ND(3)	ND(1)	--	--	--
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	0.32 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100) UJ	ND(500) UJ
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(20)	ND(60)	ND(200)	ND(20)	ND(20)	ND(40)	ND(20)	ND(60)	ND(20)	ND(20)	ND(20)	ND(20)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	ND(100) UJ	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(100)	ND(20) UJ	ND(100)
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(10)	ND(30)	ND(100)	ND(10)	ND(10)	ND(20)	ND(10)	ND(30)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ	ND(5)
Production Wells	PW-3	03/12/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	06/29/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ	ND(5)
Production Wells	PW-4	03/12/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	06/29/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Isopropylbenzene (µg/L)	Methylene Chloride (µg/L)	MTBE (µg/L)	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butylbenzene (µg/L)	Tetrachloroethene (µg/L)
Cleanup Levels			197	700	1.39	447	5	143	1,000	660	NA	2,000	100	690	5
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	ND(5)	--	ND(5)	ND(15)	410	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	ND(5)	--	ND(5)	ND(15)	440	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(5) UJ	ND(5)	ND(25) UJ	ND(5)	ND(25)	897	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(6)	1200	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	ND(2)	--	ND(2)	ND(6)	1300	ND(6)	ND(2)	ND(2)	0.44 J	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	ND(2)	--	ND(2)	ND(6)	1100	ND(6)	ND(2)	ND(2)	0.84 J	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	0.87 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	ND(2)	--	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	ND(2)	--	ND(2)	ND(6)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(10)	520	ND(10)	19	ND(30)	110	3.1 J	52	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(10)	590	ND(10)	22	ND(30)	180	3 J	57	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	690	--	23	ND(30)	240	ND(30)	63	ND(10)	1.5 J	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	930	--	26	ND(30)	390	3.2 J	66	ND(10)	2.6 J	2.1 J	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(50)	1900	ND(50)	85	ND(150)	1200	58 J	210	10 J	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	0.46 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.42 J
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.45 J
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	ND(1)	--	0.37 J	ND(3)	1.1	ND(3)	ND(1)	ND(1)	0.51 J	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(1)	33.4	ND(5)	12.2	ND(5)	ND(1)	3.32	16.1	1.09	7.74	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	1.03	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	1.2	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	1.3	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	ND(1)	--	ND(1)	ND(3)	0.94 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	ND(1)	--	ND(1)	ND(3)	1	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(1)	0.63 J	ND(1)	ND(1)	ND(3)	0.56 J	ND(3)	ND(1)	ND(1)	0.23 J	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(1)	0.5 J	ND(1)	ND(1)	ND(3)	1.1	ND(3)	0.2 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	0.75 J	--	ND(1)	ND(3)	0.51 J	ND(3)	0.32 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	1.2	--	0.35 J	ND(3)	0.57 J	0.32 J	0.63 J	0.29 J	0.26 J	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(1)	1.25 J	ND(5)	1.11 J	ND(5)	2.51	ND(1)	1.36 J	2.22	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-42	03/04/21	ND(1)	1.5	ND(1)	1.7	ND(3)	2.9	0.94 J	1.4	0.42 J	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-42	06/15/21	ND(2)	1.5 J	ND(2)	1.5 J	ND(6)	3.8	ND(6)	1.3 J	1.4 J	ND(2)	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	2.9	--	3.3	ND(6)	2.8	1.3 J	4 J	0.94 J	0.91 J	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	3.3	--	4.1	ND(6)	2.7	1.8 J	5	1.2 J	1.3 J	ND(2)	ND(2)	ND(2)
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(1) UJ	ND(1)	ND(5) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	06/24/21	ND(1)	0.94 J	ND(1)	ND(1)	ND(3)	ND(1)	0.3 J	0.44 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	ND(1)	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	06/16/21	ND(1)	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	ND(1)	--	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	0.91 J	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	ND(100)	1430	ND(500)	116	ND(500)	123	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(20)	1200	ND(20)	110	ND(60)	14 J	6 J	110	9.6 J	ND(20)	ND(20)	ND(20)	ND(20)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	ND(20) UJ	1130	ND(100)	61.1	ND(100)	22.5	ND(20)	102	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(10)	890	ND(10)	74	ND(30)	42	15 J	120	3.9 J	12	ND(10)	ND(10)	ND(10)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Production Wells	PW-3	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-3	09/17/21	--	ND(1)	--	--	--	--	--	ND(1)	--	--	--	--	ND(1)
Production Wells	PW-3	12/16/21	--	0.23 J	--	--	--	ND(1)	--	ND(1)	--	--	--	--	ND(1)
Production Wells	PW-4	12/28/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Production Wells	PW-4	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Production Wells	PW-4	09/17/21	--	ND(1)	--	--	--	ND(1)	--	ND(1)	--	--	--	--	ND(1)
Production Wells	PW-4	12/28/21	--	ND(1)	--	--	--	ND(1)	--	ND(1)	--	--	--	--	ND(1)
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl Chloride (µg/L)	Xylenes, Total (µg/L)
Cleanup Levels			1,000	100	NA	5	1,137	2	620
Marketing Tank Farm Wells	MKTF-31	09/16/21	ND(5)	--	--	4.1 J	--	ND(5)	ND(7.5)
Marketing Tank Farm Wells	MKTF-31	12/16/21	ND(5)	--	--	5.1	--	ND(5)	ND(7.5)
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(5)	ND(5)	ND(25)	ND(5)	ND(5)	ND(5) UJ	ND(50)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Marketing Tank Farm Wells	MKTF-32	09/14/21	ND(2)	--	--	ND(2)	--	ND(2)	ND(3)
Marketing Tank Farm Wells	MKTF-32	12/09/21	ND(2)	--	--	ND(2)	--	1.6 J	ND(3)
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	0.95 JB	ND(1)	ND(1)	1.7	ND(1)	ND(1)	1.5
Marketing Tank Farm Wells	MKTF-34	09/14/21	0.64 J	--	--	2.8	--	ND(2)	1.1 J
Marketing Tank Farm Wells	MKTF-34	12/09/21	ND(2)	--	--	2.7	--	ND(2)	2.8 J
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	100	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	940
Marketing Tank Farm Wells	MKTF-35	06/23/21	170	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	700
Marketing Tank Farm Wells	MKTF-35	09/14/21	70	--	--	ND(10)	--	ND(10)	330
Marketing Tank Farm Wells	MKTF-35	12/21/21	4100	--	--	ND(10)	--	ND(10)	1500
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	12000	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	4200
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-38	09/22/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-38	12/21/21	0.45 J	--	--	0.24 J	--	ND(1)	0.37 J
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-40	09/21/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-40	12/17/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1) UJ	ND(10)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	6.2
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	4
Marketing Tank Farm Wells	MKTF-41	09/14/21	ND(1)	--	--	ND(1)	--	ND(1)	7.3
Marketing Tank Farm Wells	MKTF-41	12/09/21	ND(1)	--	--	ND(1)	--	ND(1)	10
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	26.5 J
Marketing Tank Farm Wells	MKTF-42	03/04/21	0.66J/ND(1)U*	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	30
Marketing Tank Farm Wells	MKTF-42	06/15/21	0.62J/ND(2)U*	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	30
Marketing Tank Farm Wells	MKTF-42	09/14/21	0.86 J	--	--	ND(2)	--	ND(2)	63
Marketing Tank Farm Wells	MKTF-42	12/09/21	1.3 J	--	--	ND(2)	--	ND(2)	66
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1) UJ	ND(10)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-43	06/24/21	0.85J/ND(1)U*	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	7.4
Marketing Tank Farm Wells	MKTF-43	09/23/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-43	12/08/21	0.32 J	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-44	09/30/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-44	12/23/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-46	06/16/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-46	09/14/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-46	12/09/21	ND(1)	--	--	ND(1)	--	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	10000	ND(100)	ND(500)	ND(100)	ND(100) UJ	ND(100)	7450
Marketing Tank Farm Wells	MKTF-49	03/09/21	7900	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	6400 J
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	27.3	ND(20)	ND(100)	ND(20)	ND(20) UJ	ND(20)	286
Marketing Tank Farm Wells	MKTF-50	03/09/21	35	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	560 J
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Production Wells	PW-3	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Production Wells	PW-3	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Production Wells	PW-3	09/17/21	ND(1)	--	--	--	--	--	ND(1.5)
Production Wells	PW-3	12/16/21	ND(1)	--	--	--	--	--	0.94 J
Production Wells	PW-4	12/28/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Production Wells	PW-4	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Production Wells	PW-4	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Production Wells	PW-4	09/17/21	ND(1)	--	--	--	--	--	ND(1.5)
Production Wells	PW-4	12/28/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,1,1,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trichlorobenzene (µg/L)
	Cleanup Levels		5.74	200	10	5	25	7	NA	7	0.0084	70
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	--	ND(1)	ND(1)	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	--	ND(1)	ND(1)	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5) UJ	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	--	ND(10)	ND(10)	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	--	ND(10)	ND(10)	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	--	ND(1)	ND(1)	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	--	ND(1)	ND(1)	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(1)	ND(1)	ND(1)	ND(5)	1.04	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(2)	ND(2)	ND(4)	ND(2)	1.1 J	ND(2)	ND(2)	ND(2)	ND(4)	ND(2)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(5)	ND(5)	ND(10)	ND(5)	2.9 J	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	--	--	2.1 J	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	--	2.5	ND(2)	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(1)	ND(1)	ND(2)	0.34 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	--	ND(1)	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5) UJ	ND(1)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)
Tank Farm Wells	OW-57	03/12/21	ND(20)	ND(20)	ND(20)	ND(40)	ND(20)	ND(20)	ND(20)	ND(20)	ND(40)	ND(20)
Tank Farm Wells	OW-57	06/23/21	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)
Tank Farm Wells	OW-57	09/16/21	--	--	--	--	ND(50)	--	--	--	--	--
Tank Farm Wells	OW-57	12/14/21	--	--	--	--	ND(50)	--	--	--	--	--
Tank Farm Wells	OW-58	12/22/20	ND(200) UJ	ND(200)	ND(200)	ND(1000) UJ	ND(200)	ND(200)	ND(200)	ND(200) UJ	ND(1000)	ND(200) UJ
Tank Farm Wells	OW-58	03/12/21	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(200)	ND(100)
Tank Farm Wells	OW-58	06/23/21	ND(100)	ND(100)	ND(200)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(200)	ND(100)
Tank Farm Wells	OW-58	09/16/21	--	--	--	--	ND(100)	--	--	--	--	--
Tank Farm Wells	OW-58	12/14/21	--	--	--	--	ND(100)	--	--	--	--	--
Tank Farm Wells	OW-58A	12/23/20	ND(50)	ND(50)	ND(50)	ND(250)	ND(50)	ND(50)	ND(50)	ND(50)	ND(250)	ND(50)
Tank Farm Wells	OW-58A	03/12/21	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)
Tank Farm Wells	OW-58A	06/23/21	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)
Tank Farm Wells	OW-58A	09/16/21	--	--	--	--	ND(50)	--	--	--	--	--
Tank Farm Wells	OW-58A	12/14/21	--	--	--	--	23 J	--	--	--	--	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)
Tank Farm Wells	OW-63	03/03/21	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)
Tank Farm Wells	OW-63	06/15/21	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	--
Tank Farm Wells	OW-63	09/29/21	--	--	--	--	24 J	--	--	--	--	--
Tank Farm Wells	OW-63	12/17/21	--	--	--	--	29 J	--	--	--	--	--
Tank Farm Wells	OW-64	12/11/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Tank Farm Wells	OW-64	09/23/21	--	--	--	--	ND(1)	--	--	--	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	--	--	0.51 J	--	--	--	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trimethylbenzene (µg/L)	1,2-Dibromo 3-chloropropane (µg/L)	1,2-Dibromoethane ^A (µg/L)	1,2-Dibromoethane ^B (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,3-Dichloropropane (µg/L)
	Cleanup Levels		56	0.0033	0.05	0.05	600	5	5	60	NA	370
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	ND(1)	--	--	--	--	0.28 J	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	0.14J/ND(1)U*	--	ND(1)	--	--	0.39 J	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	ND(10)	--	--	--	--	ND(10)	--	ND(10)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	1.7 J	--	ND(10)	--	--	ND(4)	--	ND(10)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	--	--	ND(0.0094)	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(1)	ND(2)	0.31 J	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	ND(1)	--	--	ND(0.0094)	--	0.28 J	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	0.17J/ND(1)U*	--	--	ND(0.0094)	--	0.39 J	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(2)	ND(4)	ND(2)	ND(0.0094)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(5)	ND(10)	ND(5)	ND(0.0094)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	ND(5)	--	--	ND(0.0094)	--	1.4 J	--	ND(5)	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	1.1 J	--	--	ND(0.0095)	--	2 J	--	ND(2)	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(1)	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	0.22 J	--	--	--	--	ND(1)	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	ND(1)	--	--	ND(0.0094)	--	--	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	ND(1)	--	--	--	--	--	--	ND(1)	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	--	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	32.2	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	24.1	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	17	--	--	--	--	--	--	12	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	17	--	--	--	--	--	--	14	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	9.55	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	5.52	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	10	--	--	--	--	--	--	6.6	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	1.5 J	--	--	--	--	--	--	4.4	--	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	--	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(100)	ND(500) UJ	ND(100)	--	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-57	03/12/21	ND(20)	ND(40)	ND(20)	ND(0.0094)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Tank Farm Wells	OW-57	06/23/21	ND(50)	ND(100)	ND(50)	ND(0.0093)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-57	09/16/21	ND(50)	--	ND(50)	ND(0.0092)	--	ND(50)	--	ND(50)	--	--
Tank Farm Wells	OW-57	12/14/21	6.9J/ND(50)U*	--	--	ND(0.0094)	--	20 J	--	ND(50)	--	--
Tank Farm Wells	OW-58	12/22/20	ND(200)	ND(1000) UJ	ND(200) UJ	--	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200) UJ
Tank Farm Wells	OW-58	03/12/21	ND(100)	ND(200)	ND(100)	ND(0.0094)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-58	06/23/21	14J/ND(100)U*	ND(200)	ND(100)	ND(0.0093)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-58	09/16/21	ND(100)	--	ND(100)	ND(0.0093)	--	ND(100)	--	ND(100)	--	--
Tank Farm Wells	OW-58	12/14/21	21J/ND(100)U*	--	--	ND(0.0095)	--	ND(40)	--	ND(100)	--	--
Tank Farm Wells	OW-58A	12/23/20	91.4	ND(250) UJ	ND(50)	--	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-58A	03/12/21	350	ND(100)	ND(50)	ND(0.0094)	ND(50)	ND(50)	ND(50)	78	ND(50)	ND(50)
Tank Farm Wells	OW-58A	06/23/21	360	ND(100)	ND(50)	ND(0.0094)	ND(50)	ND(50)	ND(50)	46 J	ND(50)	ND(50)
Tank Farm Wells	OW-58A	09/16/21	320	--	ND(50)	ND(0.0093)	--	ND(50)	--	43 J	--	--
Tank Farm Wells	OW-58A	12/14/21	290	--	--	ND(0.0095)	--	20 J	--	59	--	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(100)	ND(500)	ND(100)	--	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-63	03/03/21	ND(50)	ND(100)	ND(50)	--	ND(50)	ND(50)	ND(50)	9.6 J	ND(50)	ND(50)
Tank Farm Wells	OW-63	06/15/21	ND(50)	ND(100)	ND(50)	--	ND(50)	ND(50)	ND(50)	ND(50)	--	ND(50)
Tank Farm Wells	OW-63	09/29/21	ND(50)	--	--	--	--	ND(50)	--	ND(50)	--	--
Tank Farm Wells	OW-63	12/17/21	ND(50)	--	ND(50)	--	--	ND(50)	--	ND(50)	--	--
Tank Farm Wells	OW-64	12/11/20	67.5	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	5.68	ND(1)	ND(1)
Tank Farm Wells	OW-64	03/03/21	50	ND(10)	ND(5)	--	ND(5)	ND(5)	ND(5)	5.1	ND(5)	ND(5)
Tank Farm Wells	OW-64	06/29/21	41	ND(2)	ND(1)	--	0.27 J	0.26J/ND(1)U*	ND(1)	2.5	ND(1)	ND(1)
Tank Farm Wells	OW-64	09/23/21	62 J	--	--	--	--	ND(1)	--	2.3	--	--
Tank Farm Wells	OW-64	12/29/21	65	--	ND(1)	--	--	ND(1)	--	3.3	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,4-Dichlorobenzene (µg/L)	2,2-Dichloropropane (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	2-Hexanone (µg/L)	4-Chlorotoluene (µg/L)	4-Methyl-2-Pentanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromobenzene (µg/L)	Bromodichloromethane (µg/L)
Cleanup Levels			75	NA	5,565	233	38	250	1,243	14,064	5	62	1.34
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25) UJ	ND(1)	ND(25) UJ	ND(25) UJ	ND(1)	--	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	--	--	--	--	--	--	--	2.2	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	--	--	--	--	--	--	--	0.75 J	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	--	--	ND(1)	--	2.9J/ND(10)U*	0.79 J	--	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	--	--	ND(1)	--	ND(10)	1.6	--	0.27 J
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	--	--	--	--	--	--	--	3800	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	204	--	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	--	--	--	--	--	--	--	200	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	--	--	--	--	--	--	--	590	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	--	--	ND(10)	--	26J/ND(100)U*	1200	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	--	--	ND(10)	--	ND(100)	940	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25) UJ	ND(1)	ND(25) UJ	ND(25) UJ	42.8	--	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	--	--	--	--	--	--	--	23	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	1.2 J	4.1J/ND(10)U*	50	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	--	--	ND(1)	--	3.4J/ND(10)U*	130	--	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	--	--	ND(1)	--	ND(10)	56	--	0.4 J
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	27.9	53.8	--	ND(1)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(2)	ND(4)	ND(20)	ND(2)	ND(20)	ND(2)	ND(20)	6.6J/ND(20)U*	4.5	ND(2)	ND(2)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(5)	ND(10)	18J/ND(50)U*	ND(5)	ND(50)	ND(5)	ND(50)	18J/ND(50)U*	42	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	ND(50)	--	--	ND(50)	ND(50)	23J/ND(50)U*	44	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	--	--	ND(2)	--	19J/ND(25)U*	55	--	ND(2)
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	0.32 J	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(1)	ND(2)	1.3J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	3J/ND(10)U*	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	--	--	--	--	2.9J/ND(10)U*	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	ND(10)	--	--	--	--	ND(10)	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(1)	ND(1)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	--	--	2.7J/ND(10)U*	ND(1)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(1)	ND(2)	1.2J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	3.4J/ND(10)U*	0.23 J	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	--	--	--	--	2.8J/ND(10)U*	ND(1)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	ND(1)	ND(1) UJ	35.1	ND(1)	ND(25)	ND(1)	ND(25)	295	285	--	ND(1)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	200	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	180	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	35J/ND(100)U*	--	--	--	ND(100)	170	210	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	24 J	--	--	--	--	140	150	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25) UJ	ND(1)	ND(25) UJ	ND(25) UJ	66.5	--	ND(1)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	26	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	150	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	5.1J/ND(20)U*	--	--	--	ND(20)	12J/ND(20)U*	99	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	ND(20)	--	--	--	--	ND(20)	7	--	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(100)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(2500)	10400	--	ND(100)
Tank Farm Wells	OW-57	03/12/21	ND(20)	ND(40)	ND(200)	ND(20)	ND(200)	ND(20)	ND(200)	ND(200)	12000	ND(20)	ND(20)
Tank Farm Wells	OW-57	06/23/21	ND(50)	ND(100)	91J/ND(500)U*	ND(50)	ND(500)	ND(50)	ND(500)	480J/ND(500)U*	13000	ND(50)	ND(50)
Tank Farm Wells	OW-57	09/16/21	--	--	ND(500)	--	--	--	--	130J/ND(500)U*	--	--	--
Tank Farm Wells	OW-57	12/14/21	--	--	ND(500)	--	--	--	--	ND(500)	14000	--	--
Tank Farm Wells	OW-58	12/22/20	ND(200)	ND(200)	ND(5000)	ND(200)	ND(5000)	ND(200) UJ	ND(5000)	ND(5000)	33000	--	ND(200) UJ
Tank Farm Wells	OW-58	03/12/21	ND(100)	ND(200)	ND(1000)	ND(100)	ND(1000)	ND(100)	ND(1000)	ND(1000)	33000	ND(100)	ND(100)
Tank Farm Wells	OW-58	06/23/21	ND(100)	ND(200)	ND(1000)	ND(100)	ND(1000)	ND(100)	120 J	750J/ND(1000)U*	33000	ND(100)	ND(100)
Tank Farm Wells	OW-58	09/16/21	--	--	ND(1000)	--	--	--	--	ND(1000)	--	--	--
Tank Farm Wells	OW-58	12/14/21	--	--	ND(1000)	--	--	--	--	ND(1000)	30000	--	--
Tank Farm Wells	OW-58A	12/23/20	ND(50)	ND(50)	ND(1250)	ND(50)	ND(1250)	ND(50)	ND(1250)	ND(1250)	6070	--	ND(50)
Tank Farm Wells	OW-58A	03/12/21	ND(50)	ND(100)	ND(500)	ND(50)	ND(500)	ND(50)	ND(500)	ND(500)	7700	ND(50)	ND(50)
Tank Farm Wells	OW-58A	06/23/21	ND(50)	ND(100)	290J/ND(500)U*	ND(50)	ND(500)	ND(50)	ND(500)	ND(500)	6800	ND(50)	ND(50)
Tank Farm Wells	OW-58A	09/16/21	--	--	ND(500)	--	--	--	--	ND(500)	--	--	--
Tank Farm Wells	OW-58A	12/14/21	--	--	ND(500)	--	--	--	--	ND(500)	6900	--	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(100)	ND(100) UJ	ND(2500)	ND(100)	ND(2500)	ND(100)	ND(2500)	ND(2500)	10000	--	ND(100)
Tank Farm Wells	OW-63	03/03/21	ND(50)	ND(100)	ND(500)	ND(50)	ND(500)	ND(50)	ND(500)	ND(500)	7900	ND(50)	ND(50)
Tank Farm Wells	OW-63	06/15/21	--	ND(100)	ND(500)	ND(50)	ND(500)	ND(50)	ND(500)	ND(500)	9900	ND(50)	ND(50)
Tank Farm Wells	OW-63	09/29/21	--	--	ND(500)	--	--	--	--	ND(500)	11000	--	--
Tank Farm Wells	OW-63	12/17/21	--	--	ND(500)	--	--	--	--	ND(500)	8900	--	--
Tank Farm Wells	OW-64	12/11/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	13.5	--	ND(1)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(10)	ND(50)	ND(5)	ND(50)	ND(5)	ND(50)	ND(50)	11	ND(5)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(1)	ND(2)	2.4J/ND(10)U*	ND(1)	2.6 J	ND(1)	ND(10)	7.3J/ND(10)U*	21	ND(1)	0.29 J
Tank Farm Wells	OW-64	09/23/21	--	--	2.2J/ND(10)U*	--	--	--	--	8.9J/ND(10)U*	130	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	ND(10)	--	--	--	--	5.3J/ND(10)U*	19	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon Disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Cis-1,3-dichloropropene (µg/L)	Dibromochloromethane (µg/L)	Dibromomethane (µg/L)
	Cleanup Levels		32.9	7.54	810	5	77.6	20,857	100	20.32	70	NA	1.68	8
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(5)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(5)	ND(1)	8.09	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	--	--	--	--	--	ND(10)	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	--	--	--	--	--	ND(10)	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(5)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	0.65 J	0.47 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(5)	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(2)	ND(6)	ND(20)	ND(2)	ND(2)	ND(4)	ND(2)	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	--	--	--	--	--	ND(2)	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(5) UJ	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	ND(5)	ND(1)	43.1	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5) UJ
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	ND(100)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	ND(100)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	ND(5)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	ND(20)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	ND(20)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(500) UJ	ND(100) UJ	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100) UJ	ND(500)
Tank Farm Wells	OW-57	03/12/21	ND(20)	ND(60)	ND(200)	ND(20)	ND(20)	ND(40)	ND(20)	ND(60)	ND(20)	ND(20)	ND(20)	ND(20)
Tank Farm Wells	OW-57	06/23/21	ND(50)	ND(150)	ND(500)	ND(50)	ND(50)	ND(100)	ND(50)	22 J	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-57	09/16/21	--	--	--	--	--	83 J	--	--	--	--	--	--
Tank Farm Wells	OW-57	12/14/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/22/20	ND(1000) UJ	ND(200)	ND(200)	ND(200)	ND(200) UJ	ND(200)	ND(200)	ND(200)	ND(200)	ND(1000)	ND(200) UJ	ND(1000)
Tank Farm Wells	OW-58	03/12/21	ND(100)	ND(300)	ND(1000)	ND(100)	ND(100)	ND(200)	ND(100)	ND(300)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-58	06/23/21	ND(100)	ND(300)	ND(1000)	ND(100)	ND(100)	ND(200)	ND(100)	ND(300)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-58	09/16/21	--	--	--	--	--	100 J	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/14/21	--	--	--	--	--	120 J	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/23/20	ND(250) UJ	ND(50) UJ	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(250)	ND(50) UJ	ND(250)
Tank Farm Wells	OW-58A	03/12/21	ND(50)	ND(150)	ND(500)	ND(50)	ND(50)	ND(100)	ND(50)	ND(150)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-58A	06/23/21	ND(50)	ND(150)	ND(500)	ND(50)	ND(50)	ND(100)	ND(50)	ND(150)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-58A	09/16/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/14/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(500) UJ	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(500)	ND(100)	ND(500)
Tank Farm Wells	OW-63	03/03/21	ND(50)	ND(150)	ND(500)	ND(50)	ND(50)	ND(100)	ND(50)	ND(150)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-63	06/15/21	ND(50)	ND(150)	ND(500)	ND(50)	ND(50)	ND(100)	ND(50)	38 J	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-63	09/29/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Tank Farm Wells	OW-63	12/17/21	--	--	--	--	--	ND(100)	--	--	--	--	--	--
Tank Farm Wells	OW-64	12/11/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(15)	ND(50)	ND(5)	ND(5)	ND(10)	ND(5)	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Tank Farm Wells	OW-64	09/23/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	--	--	--	ND(2)	--	--	--	--	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Isopropylbenzene (µg/L)	Methylene Chloride (µg/L)	MTBE (µg/L)	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butylbenzene (µg/L)	Tetrachloroethene (µg/L)
	Cleanup Levels		197	700	1.39	447	5	143	1,000	660	NA	2,000	100	690	5
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(1)	3.03	ND(5)	ND(1)	ND(5)	43.6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	2.5 J-	--	--	--	52 J-	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	11	--	--	--	52	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	12	--	1.4	--	75	ND(3)	0.53 J	ND(1)	0.18 J	--	ND(1)	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	12	--	1.5	--	80	ND(3)	0.66 J	ND(1)	0.34 J	--	ND(1)	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	880	--	--	--	3.1 J	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(1)	50.4	ND(5)	5.3	ND(5)	73.6	ND(1)	2.04	ND(1)	1.16	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	31	--	--	--	77	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	190	--	--	--	120	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	280	--	22	--	150	ND(30)	20	ND(10)	2.8 J	--	ND(10)	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	210	--	15	--	150	ND(30)	16	ND(10)	3.3 J	--	ND(10)	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(1)	4.13	ND(5)	ND(1)	ND(5)	41.9	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	4.8 J-	--	--	--	51 J-	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(1)	79	ND(1)	7.6	ND(3)	0.31 J	55	5	ND(1)	0.83 J	ND(1)	0.43 J	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	88	--	8.4	--	86	0.31 J	5.5	ND(1)	1.2	--	0.42 J	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	19	--	1.6	--	81	ND(3)	1	ND(1)	0.45 J	--	ND(1)	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(1)	5.49	ND(5)	ND(1)	ND(5)	260	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(2)	0.82 J	ND(2)	ND(2)	ND(6)	240	ND(6)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(5)	6.3	ND(5)	ND(5)	ND(15)	330	ND(15)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	5.1	--	ND(5)	2.6 J	350	ND(15)	ND(5)	ND(5)	ND(5)	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	8.2	--	ND(2)	--	320	ND(2)	1.2 J	ND(2)	ND(2)	--	ND(2)	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	9.99	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	11	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	13	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	ND(1)	--	ND(1)	--	15	ND(3)	ND(1)	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	ND(1)	--	ND(1)	ND(3)	13	ND(3)	ND(1)	ND(1)	ND(1)	--	ND(1)	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	0.8J/ND(1)U*	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	ND(1)	--	ND(1)	--	ND(1)	ND(3)	ND(1)	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	ND(1)	--	ND(1)	--	ND(1)	ND(3)	ND(1)	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	0.41 J	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	ND(1)	--	ND(1)	--	ND(1)	ND(3)	ND(1)	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	ND(1)	--	ND(1)	--	ND(1)	ND(3)	ND(1)	--	ND(1)	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	ND(1)	56	ND(5)	9.47	ND(5)	3.5	ND(1)	12.1	4.48	4.09	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	39	--	--	--	6.1 J	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	30	--	--	--	9.5 J	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	42	--	6.4 J	ND(30)	ND(10)	ND(30)	9.3 J	2.4 J	2.3 J	--	ND(10)	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	39	--	7.3 J	ND(30)	ND(10)	ND(30)	9.7 J	3.6 J	4.1 J	--	ND(10)	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	ND(1)	9.37	ND(5)	1.5	ND(5)	1.74	ND(1)	1.22	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	0.84 J	--	--	--	3.9	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	44 J	--	--	--	1.9 J	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	10	--	1.6 J	ND(6)	4.6	ND(6)	0.93 J	ND(2)	ND(2)	--	ND(2)	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	5.1	--	0.89 J	ND(6)	5.2	ND(6)	0.79 J	0.5 J	0.47 J	--	ND(2)	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(100)	218	ND(500)	ND(100)	ND(500)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-57	03/12/21	ND(20)	430	ND(20)	ND(20)	ND(60)	69	ND(60)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Tank Farm Wells	OW-57	06/23/21	ND(50)	570	ND(50)	15 J	ND(150)	83	ND(150)	33 J	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-57	09/16/21	--	--	--	10 J	ND(150)	--	ND(150)	36 J	ND(50)	ND(50)	--	ND(50)	--
Tank Farm Wells	OW-57	12/14/21	--	550	--	14 J	ND(150)	46 J	ND(150)	38 J	--	ND(50)	ND(50)	ND(50)	--
Tank Farm Wells	OW-58	12/22/20	ND(200) UJ	1060	ND(1000) UJ	ND(200)	ND(1000)	1830	ND(200)	ND(200)	ND(200)	ND(200)	ND(200) UJ	ND(200) UJ	ND(200)
Tank Farm Wells	OW-58	03/12/21	ND(100)	1200	ND(100)	28 J	ND(300)	1900	ND(300)	96 J	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-58	06/23/21	ND(100)	1200	ND(100)	32 J	ND(300)	1800	ND(300)	82 J	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-58	09/16/21	--	--	--	25 J	ND(300)	--	ND(300)	100	ND(100)	--	ND(100)	--	--
Tank Farm Wells	OW-58	12/14/21	--	1300	--	35 J	ND(300)	1300	ND(300)	110	--	15 J	ND(100)	ND(100)	--
Tank Farm Wells	OW-58A	12/23/20	ND(50)	203	ND(250)	ND(50)	ND(250)	2430	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-58A	03/12/21	ND(50)	580	ND(50)	34 J	ND(150)	2500	ND(150)	83	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-58A	06/23/21	ND(50)	560	ND(50)	37 J	ND(150)	2600	ND(150)	75	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-58A	09/16/21	--	--	--	31 J	ND(150)	--	ND(150)	71	ND(50)	--	ND(50)	--	--
Tank Farm Wells	OW-58A	12/14/21	--	570	--	36 J	ND(150)	2500	ND(150)	91	--	9.2 J	ND(50)	ND(50)	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(100) UJ	1320	ND(500)	ND(100)	ND(500)	170	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Tank Farm Wells	OW-63	03/03/21	ND(50)	1200	ND(50)	65	ND(150)	ND(50)	ND(50)	23 J	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-63	06/15/21	ND(50)	1300	--	43 J	ND(150)	ND(50)	ND(50)	22 J	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Tank Farm Wells	OW-63	09/29/21	--	1300	--	64	180	ND(50)	ND(50)	18 J	ND(50)	ND(50)	--	ND(50)	--
Tank Farm Wells	OW-63	12/17/21	--	1300	--	63	ND(150)	21 J	ND(50)	23 J	ND(50)	14 J	--	ND(50)	--
Tank Farm Wells	OW-64	12/11/20	ND(1) UJ	40.5	ND(5)	15.7	ND(5)	ND(1)	ND(1)	10	3.79	ND(1)	ND(1)	ND(1)	ND(1)
Tank Farm Wells	OW-64	03/03/21	ND(5)	50	ND(5)	22	ND(15)	ND(5)	ND(15)	12	3 J	5.3	ND(5)	1.7 J	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(1)	29	ND(1)	12	ND(3)	ND(1)	ND(3)	6.8	2.3	4.4	ND(1)	1.2	ND(1)
Tank Farm Wells	OW-64	09/23/21	--	37 J	--	10 J	ND(3)	ND(1)	ND(3)	4.7 J	1.8	3.2	--	0.9 J	--
Tank Farm Wells	OW-64	12/29/21	--	32	--	9.2	ND(3)	ND(1)	ND(3)	4.5	2	2.7	--	ND(1)	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl Chloride (µg/L)	Xylenes, Total (µg/L)
Cleanup Levels			1,000	100	NA	5	1,137	2	620
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	ND(1)	--	--	--	--	--	ND(1.5) R
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	ND(1) UJ	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	1500	--	--	--	--	--	5000
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	ND(10)	--	--	--	--	--	ND(15) UJ
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	2J/ND(10)U*	--	--	--	--	--	10 J
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	ND(10)	--	--	--	--	--	14 J
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	ND(10)	--	--	--	--	--	31
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	ND(1)	--	--	--	--	--	ND(1.5) R
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.3
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	ND(1)	--	--	--	--	--	3.9
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	ND(1)	--	--	--	--	--	2.1
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(3)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(5) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(7.5)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	ND(5)	--	--	--	--	--	ND(7.5)
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	ND(2)	--	--	--	--	--	ND(4)
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1) UJ	ND(1)	ND(10)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5) UJ
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	ND(1)	--	--	--	--	--	ND(1.5)
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	52.1	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	93.2
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	29	--	--	--	--	--	56 J
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	9.5/ND(10)U*	--	--	--	--	--	14 J
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	9.6 J	--	--	ND(10)	--	--	35
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	5.6 J	--	--	ND(10)	--	--	23
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	5.91	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	16.1
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	1.5 J	--	--	--	--	--	12 J
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	6.8 J	--	--	--	--	--	43 J
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	0.46 J	--	--	ND(2)	--	--	ND(3)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	0.65 J	--	--	ND(2)	--	--	ND(3)
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(100)	ND(100)	ND(500) UJ	ND(100)	ND(100)	ND(100)	ND(1000)
Tank Farm Wells	OW-57	03/12/21	40	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	110
Tank Farm Wells	OW-57	06/23/21	42J/ND(50)U*	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	150
Tank Farm Wells	OW-57	09/16/21	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	12/14/21	39 J	--	--	--	--	--	130
Tank Farm Wells	OW-58	12/22/20	ND(200) UJ	ND(200)	ND(1000) UJ	ND(200)	ND(200)	ND(200)	ND(2000) UJ
Tank Farm Wells	OW-58	03/12/21	96 J	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	190
Tank Farm Wells	OW-58	06/23/21	85J/ND(100)U*	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	190
Tank Farm Wells	OW-58	09/16/21	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/14/21	86 J	--	--	--	--	--	190
Tank Farm Wells	OW-58A	12/23/20	52.6	ND(50)	ND(250) UJ	ND(50)	ND(50)	ND(50)	ND(500)
Tank Farm Wells	OW-58A	03/12/21	100	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	780
Tank Farm Wells	OW-58A	06/23/21	100	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	770
Tank Farm Wells	OW-58A	09/16/21	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/14/21	130	--	--	--	--	--	680
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(100)	ND(100)	ND(500)	ND(100)	ND(100)	ND(100)	ND(1000)
Tank Farm Wells	OW-63	03/03/21	51	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	180
Tank Farm Wells	OW-63	06/15/21	49 J	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	160
Tank Farm Wells	OW-63	09/29/21	54	--	--	--	--	--	170
Tank Farm Wells	OW-63	12/17/21	54	--	--	--	--	--	160
Tank Farm Wells	OW-64	12/11/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	42.1
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	33
Tank Farm Wells	OW-64	06/29/21	1 JB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	22
Tank Farm Wells	OW-64	09/23/21	14 J	--	--	--	--	--	30 J
Tank Farm Wells	OW-64	12/29/21	ND(1)	--	--	--	--	--	14
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,1,1,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trichlorobenzene (µg/L)
Cleanup Levels			5.74	200	10	5	25	7	NA	7	0.0084	70
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/12/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-1C	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-1C	09/20/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2A	09/12/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2A	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2A	09/20/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2B	09/12/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2B	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2B	09/21/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2C	09/18/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2C	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2C	09/22/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3B	09/12/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3B	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3B	09/21/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3C	09/18/18	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3C	08/14/19	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3C	09/22/20	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1) UJ
Western Boundary Wells	BW-4B	03/10/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-4B	06/10/21	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	ND(1)	--	--	--	--	--
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Western Boundary Wells	BW-5B	03/03/21	ND(1)	ND(1)	ND(2)	ND(1)	0.47 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-5B	06/29/21	ND(1)	ND(1)	ND(2)	ND(1)	0.42 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	0.54 J	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)
Western Boundary Wells	BW-5C	03/03/21	ND(1)	ND(1)	ND(2)	ND(1)	0.82 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-5C	06/29/21	ND(1)	ND(1)	ND(2)	ND(1)	0.65 J	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	0.82 J	--	--	--	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trimethylbenzene (µg/L)	1,2-Dibromo 3-chloropropane (µg/L)	1,2-Dibromoethane ^A (µg/L)	1,2-Dibromoethane ^B (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,3-Dichloropropane (µg/L)
Cleanup Levels			56	0.0033	0.05	0.05	600	5	5	60	NA	370
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/12/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/20/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/12/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/20/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/12/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/21/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/18/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/22/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/12/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/21/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/18/18	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	08/14/19	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/22/20	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	ND(1) UJ	ND(5) UJ	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)	ND(1)
Western Boundary Wells	BW-4B	03/10/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	06/10/21	ND(1)	ND(2)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	ND(0.0095)	--	ND(1)	--	--	--	--
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	03/03/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.49 J	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	06/29/21	ND(1)	ND(2)	ND(1)	ND(0.0094)	ND(1)	0.36J/ND(1)U*	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	09/23/21	--	--	--	ND(0.0093)	--	0.4 J	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	ND(0.0094)	--	0.51 J	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	ND(1)	ND(5)	ND(1)	--	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	03/03/21	ND(1)	ND(2)	ND(1)	ND(0.0093)	ND(1)	0.68 J	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	06/29/21	ND(1)	ND(2)	ND(1)	ND(0.0092)	ND(1)	0.56J/ND(1)U*	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	09/23/21	--	--	--	ND(0.0093)	--	0.58 J	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	ND(0.0093)	--	0.66 J	--	--	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,4-Dichlorobenzene (µg/L)	2,2-Dichloropropane (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	2-Hexanone (µg/L)	4-Chlorotoluene (µg/L)	4-Methyl-2-Pentanone (µg/L)	Acetone (µg/L)	Benzene (µg/L)	Bromobenzene (µg/L)	Bromodichloromethane (µg/L)
Cleanup Levels			75	NA	5,565	233	38	250	1,243	14,064	5	62	1.34
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	3.6	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/12/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.5	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/20/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-2A	09/13/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	9.1	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/12/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/20/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-2B	09/13/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	6.1	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/12/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.2	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/21/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-2C	09/13/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	6.9	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/18/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	4.1	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/22/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	8.6	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/12/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	3.5	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/21/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-3C	09/13/17	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	3.8	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/18/18	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	1.9	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	08/14/19	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/22/20	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1) UJ	ND(25)	ND(25)	ND(1)	--	ND(1)
Western Boundary Wells	BW-4B	03/10/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	06/10/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(1)	ND(1) UJ	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Western Boundary Wells	BW-5B	03/03/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	06/29/21	ND(1)	ND(2)	2J/ND(10)U*	ND(1)	ND(10)	ND(1)	ND(10)	2.7J/ND(10)U*	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-5C	12/09/20	ND(1)	ND(1)	ND(25)	ND(1)	ND(25)	ND(1)	ND(25)	ND(25)	ND(1)	--	ND(1)
Western Boundary Wells	BW-5C	03/03/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	06/29/21	ND(1)	ND(2)	ND(10)	ND(1)	ND(10)	ND(1)	ND(10)	3.1J/ND(10)U*	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	--	--	--	ND(10)	ND(1)	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon Disulfide (µg/L)	Carbon tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	Cis-1,3-dichloropropene (µg/L)	Dibromochloromethane (µg/L)	Dibromomethane (µg/L)
Cleanup Levels			32.9	7.54	810	5	77.6	20,857	100	20.32	70	NA	1.68	8
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/12/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/20/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/12/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/20/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/12/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/21/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/18/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/22/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/12/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/21/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/18/18	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	08/14/19	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/22/20	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(5)
Western Boundary Wells	BW-4B	03/10/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	06/10/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Western Boundary Wells	BW-5B	03/03/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	06/29/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	09/23/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)
Western Boundary Wells	BW-5C	03/03/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	06/29/21	ND(1)	ND(3)	ND(10)	ND(1)	ND(1)	ND(2)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	09/23/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dichlorodifluoromethane (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Isopropylbenzene (µg/L)	Methylene Chloride (µg/L)	MTBE (µg/L)	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butylbenzene (µg/L)	Tetrachloroethene (µg/L)
	Cleanup Levels		197	700	1.39	447	5	143	1,000	660	NA	2,000	100	690	5
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-1C	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2A	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/21/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2B	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/22/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-2C	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/21/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3B	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/22/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-3C	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1) UJ	ND(1)
Western Boundary Wells	BW-4B	03/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	06/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-4B	09/29/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	ND(1)	--	--	--	ND(1)	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(1) UJ	ND(1)	ND(5)	ND(1)	ND(5)	9.57	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	03/03/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	14	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	13	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5B	09/23/21	--	ND(1)	--	--	--	15	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	ND(1)	--	--	--	14	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	35	ND(1) UJ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	03/03/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	31	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(3)	27	ND(3)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Western Boundary Wells	BW-5C	09/23/21	--	ND(1)	--	--	--	29	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	ND(1)	--	--	--	25	--	--	--	--	--	--	--

TABLE 5-1. VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoromethane (µg/L)	Vinyl Chloride (µg/L)	Xylenes, Total (µg/L)
Cleanup Levels			1,000	100	NA	5	1,137	2	620
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-1C	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-1C	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-1C	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-1C	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-2A	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2A	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2A	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2A	09/20/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2A	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-2B	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2B	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2B	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2B	09/21/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2B	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-2C	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2C	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2C	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2C	09/22/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-2C	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3B	09/12/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3B	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3B	09/21/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3B	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-3C	09/13/17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3C	09/18/18	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3C	08/14/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3C	09/22/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-3C	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	ND(1)	ND(1)	ND(5) UJ	ND(1)	ND(1)	ND(1)	ND(10)
Western Boundary Wells	BW-4B	03/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-4B	06/10/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-4B	09/29/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-4B	12/08/21	0.39 J	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-5A	2017 - 2021	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Western Boundary Wells	BW-5B	12/11/20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-5B	03/03/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-5B	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-5B	09/23/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-5B	12/08/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-5C	12/09/20	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(10)
Western Boundary Wells	BW-5C	03/03/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-5C	06/29/21	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.5)
Western Boundary Wells	BW-5C	09/23/21	ND(1)	--	--	--	--	--	ND(1.5)
Western Boundary Wells	BW-5C	12/08/21	ND(1)	--	--	--	--	--	ND(1.5)

Notes:
-- = Not Measured
MTBE = methyl tert butyl ether
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
µg/L = micrograms per liter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.
J = Estimated concentration
J- = Estimated concentration, possibly biased low
J+ = Estimated concentration, possibly biased high
JB = Estimated concentration due to blank contamination
R = Rejected, Data not usable
UJ = Estimated reporting limit
U = Evaluated to be undetected at the reported concentration
* = The first result represents the laboratory reported concentration. The second result was evaluated to be undetected at the reported concentration by the data validator. The result was determined to be a false positive.
A = 1,2-Dibromomethane analyzed by method 8260.
B = 1,2-Dibromomethane analyzed by method 8011.

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,4-Dioxane (µg/L)	1-Methylnaphthalene (µg/L)	2,4,5-Trichlorophenol (µg/L)	2,4,6-Trichlorophenol (µg/L)	2,4-Dichlorophenol (µg/L)	2,4-Dimethylphenol (µg/L)	2,4-Dinitrophenol (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)
	Cleanup Levels		70	600	NA	75	4.59	11.38	1,166	11.9	45.3	354	38.7	2.38	0.485
Deep Monitoring Wells	OW-01	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	06/10/21	--	--	--	--	0.24 J	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	ND(1.1)	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	06/10/21	--	--	--	--	1.9	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	0.94 J	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	08/20/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	ND(1)	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	--	--	--	--	ND(1)	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	--	--	--	ND(0.1) UJ	--	--	--	15	--	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	--	--	--	--	0.78 J	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	03/02/21	--	--	--	--	ND(1) UJ	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	09/24/21	--	--	--	--	ND(1)	ND(0.1)	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	--	--	--	ND(5) UJ	--	--	--	ND(5) UJ	--	--	--
Eastern Boundary Wells	OW-62	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-62	03/02/21	--	--	--	--	ND(1) UJ	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-62	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-62	09/24/21	--	--	--	--	ND(1)	ND(0.1)	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-62	12/07/21	--	--	--	--	--	ND(5)	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-63	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-64	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-64	09/24/21	--	--	--	--	0.86 J	0.22	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-64	12/29/21	--	--	--	--	ND(1)	--	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-65	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-65	09/24/21	--	--	--	--	1	13	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-65	12/29/21	--	--	--	--	ND(1)	20 J	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-66	12/23/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	06/22/21	--	--	--	--	0.9 J	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	09/24/21	--	--	--	--	0.54 J	ND(0.1)	--	--	--	ND(5.7)	--	--	--
Eastern Boundary Wells	OW-66	12/23/21	--	--	--	--	0.7 J	ND(0.1)	--	--	--	ND(5)	--	--	--
Eastern Boundary Wells	OW-66	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(10)	33 J	ND(5)	ND(5)	ND(5)	5.4 J	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-70	12/22/21	--	--	--	--	--	ND(0.1) UJ	--	--	--	ND(5)	--	--	--
Evaporation Ponds	EP-2	11/21/19	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	9.5	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	2.7	ND(0.5)	ND(0.5)	ND(0.2)
Evaporation Ponds	EP-2	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	1.3 J	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-2	12/21/20	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)	--	--	ND(53.9) UJ	ND(53.9) UJ	ND(53.9) UJ	ND(53.9) UJ	ND(162) UJ	ND(53.9)	ND(53.9)
Evaporation Ponds	EP-2	06/21/21	ND(500)	ND(500)	ND(500)	ND(500)	--	ND(20)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-2	12/15/21	--	--	--	--	--	ND(6.6)	--	--	--	ND(50)	--	--	--
Evaporation Ponds	EP-3	11/20/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	8.9	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	22	ND(2.5)	ND(2.5)	ND(1)
Evaporation Ponds	EP-3	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)	ND(2.5)
Evaporation Ponds	EP-3	12/21/20	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	1.3 J	ND(10.5) UJ	ND(10.5) UJ	ND(10.5) UJ	ND(10.5) UJ	ND(31.4) UJ	ND(10.5)	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-3	06/21/21	ND(500)	ND(500)	ND(500)	ND(500)	--	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-4	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-4	12/21/20	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	--	--	ND(10.7) UJ	ND(10.7) UJ	ND(10.7) UJ	ND(32.2) UJ	ND(10.7)	ND(10.7)	ND(10.7)
Evaporation Ponds	EP-4	06/21/21	ND(1000)	ND(1000)	ND(1000)	ND(1000)	--	ND(13)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	--	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(100)	ND(50)	ND(50)
Evaporation Ponds	EP-5	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.21)
Evaporation Ponds	EP-5	12/21/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	--	--	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(33.6) UJ	ND(11.2)	ND(11.2)	ND(11.2)
Evaporation Ponds	EP-5	06/21/21	ND(100)	ND(100)	ND(100)	ND(100)	--	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Evaporation Ponds	EP-5	12/15/21	--	--	--	--	--	ND(5.9)	--	--	--	ND(50)	--	--	--
Evaporation Ponds	EP-6	04/29/19	ND(50)	ND(50)	ND(50)	ND(50)	--	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(100)	ND(50)	ND(50)
Evaporation Ponds	EP-6	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)
Evaporation Ponds	EP-6	12/21/20	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	--	--	ND(10.5) UJ	ND(10.5) UJ	ND(10.5) UJ	ND(10.5) UJ	ND(31.6) UJ	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-6	06/21/21	ND(100)	ND(100)	ND(100)	ND(100)	--	ND(6.2)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Evaporation Ponds	EP-6	12/15/21	--	--	--	--	--	ND(6.7)	--	--	--	ND(5)	--	--	--
Evaporation Ponds	EP-7	04/29/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-7	11/20/19	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.2)
Evaporation Ponds	EP-7	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Evaporation Ponds	EP-7	12/21/20	ND(9.65)	ND(9.65)	ND(9.65)	ND(9.65)	--	--	ND(9.65) UJ	ND(9.65) UJ	ND(9.65) UJ	ND(9.65) UJ	ND(29) UJ	ND(9.65)	ND(9.65)
Evaporation Ponds	EP-7	06/21/21	ND(5) R	ND(5) R	ND(5) R	ND(5) R	--	ND(20)	ND(5) UJ	ND(5) UJ	ND(5) UJ	ND(5) UJ	ND(5) UJ	ND(5) R	ND(5) R
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.			

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Name	Location ID	Date Sampled	2-Chloronaphthalene (µg/L)	2-Chlorophenol (µg/L)	2-Methylnaphthalene (µg/L)	2-Methylphenol (µg/L)	2-Nitroaniline (µg/L)	2-Nitrophenol (µg/L)	3,3'-Dichlorobenzidine (µg/L)	3,4-Methylphenol (µg/L)	3-Nitroaniline (µg/L)	2-Methyl-4,6-dinitrophenol (µg/L)	4-Bromophenylphenylether (µg/L)	4-Chloro-3-Methylphenol (µg/L)	4-Chloroaniline (µg/L)	4-Chlorophenylphenylether (µg/L)
Cleanup Levels			733	91	35.1	NA	190	NA	1.25	NA	NA	1.52	NA	NA	0.37	NA
Deep Monitoring Wells	OW-01	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	08/20/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3/2/2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	ND(0.1) UJ	ND(5)	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	09/24/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	ND(5) UJ	ND(5) UJ	--	--	--	ND(5) UJ	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	09/24/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	ND(5)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	ND(0.1) UJ	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	4	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	5 J	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	09/24/21	--	--	ND(0.1)	ND(5.7)	--	--	--	ND(5.7)	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	09/17/21	ND(5)	ND(5)	51 J	14	ND(5)	ND(5)	ND(5)	17	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Eastern Boundary Wells	OW-70	12/22/21	--	--	ND(0.1) UJ	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Evaporation Ponds	EP-2	11/21/19	ND(0.5)	ND(0.5)	ND(0.5)	29	ND(0.5)	ND(0.5)	ND(0.5)	39	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)
Evaporation Ponds	EP-2	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	360	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-2	12/21/20	ND(53.9)	ND(53.9) UJ	--	ND(53.9) UJ	ND(53.9)	ND(53.9) UJ	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9) UJ	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)
Evaporation Ponds	EP-2	06/21/21	ND(500)	ND(500)	ND(20)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-2	12/21/20	--	--	ND(6.8)	ND(50)	ND(50)	ND(50)	ND(50)	210	ND(50)	ND(50)	ND(50)	ND(50)	--	ND(50)
Evaporation Ponds	EP-3	11/20/19	ND(2.5)	ND(2.5)	ND(2.5)	150	ND(2.5)	ND(2.5)	ND(2.5)	210	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	ND(2.5)
Evaporation Ponds	EP-3	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	260	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-3	12/21/20	ND(10.5)	ND(10.5) UJ	--	ND(10.5) UJ	ND(10.5)	ND(10.5) UJ	ND(10.5)	--	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-3	06/21/21	ND(500)	ND(500)	ND(0.45)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-4	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-4	12/21/20	ND(10.7)	ND(10.7) UJ	ND(10.7)	ND(10.7) UJ	ND(10.7) UJ	ND(10.7) UJ	ND(10.7) UJ	--	ND(10.7)	ND(10.7) UJ	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)
Evaporation Ponds	EP-4	06/21/21	ND(1000)	ND(1000)	ND(13)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(1000)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-5	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-5	12/21/20	ND(11.2)	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	--	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ
Evaporation Ponds	EP-5	06/21/21	ND(100)	ND(100)	ND(10)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Evaporation Ponds	EP-5	12/15/21	--	--	ND(5.9)	ND(50)	--	ND(50)	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	04/29/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-6	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Evaporation Ponds	EP-6	12/21/20	ND(10.5)	ND(10.5) UJ	--	ND(10.5) UJ	ND(10.5)	ND(10.5) UJ	ND(10.5)	--	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-6	06/21/21	ND(100)	ND(100)	ND(6.2)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Evaporation Ponds	EP-6	12/15/21	--	--	ND(6.7) UJ	ND(5)	--	ND(5)	--	ND(5)	--	--	--	--	--	--
Evaporation Ponds	EP-7	04/29/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Evaporation Ponds	EP-7	11/20/19	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Evaporation Ponds	EP-7	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Evaporation Ponds	EP-7	12/21/20	ND(9.65)	ND(9.65) UJ	--	ND(9.65) UJ	ND(9.65)	ND(9.65) UJ	ND(9.65)	--						

TABLE S-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	4-Nitroaniline (µg/L)	4-Nitrophenol (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Aniline (µg/L)	Anthracene (µg/L)	Azobenzene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(ghi)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Benzoic Acid (µg/L)	Benzyl Alcohol (µg/L)	Bis(2chloroethoxy)methane (µg/L)
	Cleanup Levels		3.8	NA	535	NA	13	1,721	0.12	0.12	0.2	0.34	NA	3.43	75,000	2,000	59
Deep Monitoring Wells	OW-01	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Deep Monitoring Wells	OW-10	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(23)	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Deep Monitoring Wells	OW-11	09/18/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	08/20/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	ND(0.1) UJ	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	09/24/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	ND(5) UJ	--	--	--	--	--	--	--	--	--	--	ND(5) UJ	--
Eastern Boundary Wells	OW-52	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	09/24/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	ND(5)	--	--	--	--	--	--	--	--	--	--	ND(5)	--
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	0.36	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	0.52	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-56	12/23/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	09/24/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	ND(23)	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Eastern Boundary Wells	OW-56	09/17/21	ND(5)	ND(5)	1	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(0.7)	ND(1)	ND(1)	ND(1)	ND(20)	ND(5)	ND(5)
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Eastern Boundary Wells	OW-70	12/22/21	--	--	0.24 J	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Evaporation Ponds	EP-2	11/21/19	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.1)	ND(0.05)	ND(0.1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Evaporation Ponds	EP-2	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(2.5)	8.8	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-2	12/21/20	ND(53.9)	ND(53.9) UJ	ND(53.9)	ND(53.9)	ND(53.9) R	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)	ND(162)	ND(53.9)	ND(53.9)
Evaporation Ponds	EP-2	06/21/21	ND(500)	ND(500)	ND(20)	ND(500)	ND(500)	ND(20)	ND(500)	ND(20)	ND(20)	ND(14)	ND(20)	ND(20)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-2	12/15/21	--	ND(50)	--	--	ND(50)	--	--	--	ND(4.6)	ND(6.6)	ND(6.6)	ND(6.6)	ND(200)	ND(50)	--
Evaporation Ponds	EP-3	11/20/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-3	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(2.5)	40	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-3	12/21/20	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)	ND(10.5) R	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(3.4)	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-3	06/21/21	ND(500)	ND(500)	ND(4.65)	ND(500)	ND(4.65)	ND(500)	ND(4.65)	ND(0.32)	ND(0.45)	ND(0.45)	ND(500)	ND(500)	ND(600)	ND(500)	ND(600)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	37	ND(50)	ND(50)
Evaporation Ponds	EP-4	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-4	12/21/20	ND(10.7)	ND(10.7) UJ	ND(10.7)	ND(10.7)	ND(10.7) R	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(32.2)	ND(10.7)	ND(10.7)
Evaporation Ponds	EP-4	06/21/21	ND(1000)	ND(1000)	ND(13)	ND(13)	ND(1000)	ND(13)	ND(1000)	ND(13)	ND(9.3)	ND(13)	ND(13)	ND(13)	ND(1000)	ND(1000)	ND(1000)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	36	ND(50)	ND(50)
Evaporation Ponds	EP-5	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-5	12/21/20	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2) R	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(33.6)	ND(11.2)	ND(11.2)
Evaporation Ponds	EP-5	06/21/21	ND(100)	ND(100)	ND(10)	ND(10)	ND(100)	ND(10)	ND(100)	ND(10)	ND(7)	ND(10)	ND(10)	ND(10)	ND(100)	ND(100)	ND(100)
Evaporation Ponds	EP-5	12/15/21	--	ND(50)	--	ND(50)	--	--	--	ND(4.1)	ND(5.9)	ND(5.9)	ND(5.9)	ND(5.9)	ND(200)	ND(50)	--
Evaporation Ponds	EP-6	04/29/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	37	ND(50)	ND(50)
Evaporation Ponds	EP-6	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.51)	ND(0.51)	1.5 JB	ND(0.51)	ND(0.51)
Evaporation Ponds	EP-6	12/21/20	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)	ND(10.5) R	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(31.6)	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-6	06/21/21	ND(100)	ND(100)	ND(6.2)	ND(6.2)	ND(100)	ND(6.2)	ND(100)	ND(6.2)	ND(4.4)	ND(6.2)	ND(6.2)	ND(6.2)	ND(100)	ND	

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

[illegible]

TABLE S-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Hexachlorobutadiene (µg/L)	Hexachlorocyclopentadiene (µg/L)	Hexachloroethane (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Isophorone (µg/L)	Naphthalene (µg/L)	Nitrobenzene (µg/L)	N-Nitrosodimethylamine (µg/L)	N-Nitrosodi-n-propylamine (µg/L)	N-Nitrosodiphenylamine (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Phenol (µg/L)	Pyrene (µg/L)	Pyridine (µg/L)
	Cleanup Levels		0.14	0.41	3.28	0.343	781	30	1.4	0.0049	0.011	122	1	170	5,761	117	20
Deep Monitoring Wells	OW-01	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	08/20/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	--	--	--	ND(0.1) UJ	--	--	--	--	--	ND(0.1) UJ	15	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	09/24/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5)	ND(0.2)	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	--	--	--	ND(5) UJ	--	--	--	--	--	ND(5) UJ	ND(5) UJ	ND(5) UJ	--
Eastern Boundary Wells	OW-52	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	03/02/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	06/09/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	09/24/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5)	ND(0.2)	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	--	--	--	ND(5)	--	--	--	--	--	ND(5)	ND(5)	ND(5)	--
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	--	--	--	0.18	--	--	--	--	--	ND(0.1)	1.1 J	0.2	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	--	--	--	--	--	--	--	--	--	0.3	0.22	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	--	--	--	12	--	--	--	--	--	0.76	46	0.16 J	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	--	--	--	18	--	--	--	--	--	1.1	45	ND(0.2)	--
Eastern Boundary Wells	OW-56	12/23/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	06/22/21	--	--	--	--	--	5.8 J	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	09/24/21	--	--	--	--	--	0.14	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5.7)	ND(0.2)	--
Eastern Boundary Wells	OW-56	09/17/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	110	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	2.6 J	18 J	ND(2)
Eastern Boundary Wells	OW-66	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)
Eastern Boundary Wells	OW-70	12/22/21	--	--	--	0.28 J	--	--	--	--	--	--	--	0.9 J	--	--	--
Evaporation Ponds	EP-2	11/21/19	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	--	--	ND(0.5)	ND(0.5)	ND(0.5)	190	ND(0.5)	ND(0.5)
Evaporation Ponds	EP-2	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	4.6	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-2	12/21/20	--	ND(108)	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9) UJ	ND(53.9)	ND(53.9)	ND(53.9)	ND(53.9)	ND(108)	ND(53.9)	ND(53.9) UJ	ND(53.9)	ND(53.9)
Evaporation Ponds	EP-2	06/21/21	ND(500)	ND(500)	ND(500)	ND(60)	ND(500)	ND(20)	ND(500)	ND(500)	ND(500)	ND(500)	ND(2000)	ND(500)	ND(500)	ND(40)	ND(500)
Evaporation Ponds	EP-2	12/15/21	--	--	--	ND(20)	--	ND(6.6)	--	--	--	--	--	ND(6.6)	ND(50)	ND(13) UJ	ND(50) UJ
Evaporation Ponds	EP-3	11/20/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)	ND(2.5)	ND(2.5)	ND(2.5)	--	--	ND(2.5)	ND(2.5)	ND(2.5)	700	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-3	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-3	12/21/20	--	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(20.9)	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-3	06/21/21	ND(500)	ND(500)	ND(500)	ND(1.4)	ND(500)	ND(600)	ND(500)	ND(500)	ND(500)	ND(500)	ND(2000)	ND(500)	ND(405)	ND(500)	ND(500)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-4	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.21)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-4	12/21/20	--	ND(21.4)	ND(10.7)	ND(21.4)	ND(10.7)	ND(10.7) UJ	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7) UJ	ND(10.7)	ND(10.7)
Evaporation Ponds	EP-4	06/21/21	ND(1000)	ND(1000)	ND(1000)	ND(40)	ND(1000)	ND(13)	ND(1000)	ND(1000)	ND(1000)	ND(1000)	ND(4000)	ND(13)	ND(1000)	ND(27)	ND(1000)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-5	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.21)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)	ND(0.52)
Evaporation Ponds	EP-5	12/21/20	--	ND(22.4)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(22.4)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)
Evaporation Ponds	EP-5	06/21/21	ND(100)	ND(100)	ND(100)	ND(30)	ND(100)	ND(10)	ND(100)	ND(100)	ND(100)	ND(100)	ND(400)	ND(100)	ND(100)	ND(20)	ND(100)
Evaporation Ponds	EP-5	12/15/21	--	--	--	ND(18)	--	ND(5.9)	--	--	--	--	--	ND(5.9)	--	ND(12) UJ	ND(50) UJ
Evaporation Ponds	EP-6	04/29/19	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-6	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Evaporation Ponds	EP-6	12/21/20	--	ND(21.1)	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)	ND(10.5)	ND(10.5)	ND(21.1)	ND(10.5)	ND(10.5) UJ	ND(10.5)	ND(10.5)
Evaporation Ponds	EP-6	06/21/21	ND(100)	ND(100)	ND(100)	ND(19)	ND(100)	ND(6.2)	ND(100)	ND(100)	ND						

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Benzidine (µg/L)	2,3,4,6-Tetrachlorophenol (µg/L)	2,3,5,6-Tetrachlorophenol (µg/L)	Dibenz(a,h)acridine (µg/L)	7,12-Dimethylbenz(a)anthracene (µg/L)	1,2-Diphenylhydrazine (µg/L)	Quinoline (µg/L)	Thiophenol (Benzene thiol) (µg/L)
	Cleanup Levels		0.0011	240	NA	NA	0.0001	0.780	0.024	NA
Deep Monitoring Wells	OW-01	12/11/20	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	03/03/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	06/10/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	06/10/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/18	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	08/20/19	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/20/20	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/30/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/18	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	03/02/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	06/09/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/07/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/09/20	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	03/02/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	06/09/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/07/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-54	12/29/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	12/29/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/20	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	03/10/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	06/22/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	09/24/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	09/17/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/07/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	12/22/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	11/21/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	--	--	--	--	--
Evaporation Ponds	EP-2	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	12/15/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	11/20/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	09/16/20	ND(2.5)	ND(2.5)	ND(2.5)	--	--	--	--	--
Evaporation Ponds	EP-3	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	--	--	--	--	--
Evaporation Ponds	EP-4	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	09/17/20	ND(0.52)	ND(0.52)	ND(0.52)	--	--	--	--	--
Evaporation Ponds	EP-5	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/15/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	04/29/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Evaporation Ponds	EP-6	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/15/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	04/29/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	11/20/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Evaporation Ponds	EP-7	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Evaporation Ponds	EP-8	12/22/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	11/20/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	09/17/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Evaporation Ponds	EP-9	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/15/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	09/07/18	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	04/29/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	12/22/20	--	--	--	--	--	--	--	--

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Group Name	Location ID	Date Sampled	1,2,4-Trichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,4-Dioxane (µg/L)	1-Methylnaphthalene (µg/L)	2,4,5-Trichlorophenol (µg/L)	2,4,6-Trichlorophenol (µg/L)	2,4-Dichlorophenol (µg/L)	2,4-Dimethylphenol (µg/L)	2,4-Dinitrophenol (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)
Cleanup Levels			70	600	NA	75	4.59	11.38	1,166	11.9	45.3	354	38.7	2.38	0.485
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(50)	ND(50)	ND(50)	ND(50)	--	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-12A	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	5.3	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	12	ND(2.5)	ND(2.5)	ND(1)
Evaporation Ponds	EP-12A	12/22/20	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	--	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	6.9	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)
Evaporation Ponds	EP-12B	09/18/20	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(0.91) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(23.3) UJ	ND(23.3)	ND(23.3)	ND(23.3)	--	--	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ	ND(23.3)	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(500)	ND(500)	ND(500)	ND(500)	--	ND(20)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	09/22/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51) UJ	ND(0.51)	ND(0.2)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	ND(1)	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-2	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	09/18/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	09/18/20	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.2) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51) UJ	ND(0.51)	ND(0.2)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5) UJ	ND(5)	ND(5)	ND(5)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	9.1	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.23) UJ
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	ND(1) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	11 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	--	ND(5)	--	18 J	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	--	--	ND(11.4)	ND(11.4) UJ	ND(11.4) UJ	ND(11.4) UJ	ND(34.1)	ND(11.4) UJ	ND(11.4)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(5)	ND(5)	ND(5)	--	26	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	15	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	--	ND(5)	160	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	9 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	--	ND(5)	23 J	10 J	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	--	--	ND(10.2)	ND(10.2) UJ	ND(10.2) UJ	26.6	ND(30.5)	ND(10.2) UJ	ND(10.2)
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(5)	ND(5)	ND(5)	--	50	ND(5)	ND(5)	ND(5)	18	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(5)	ND(5)	ND(5)	ND(5)	--	42	ND(5)	ND(5)	ND(5)	15	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	--	42	ND(5)	ND(5)	ND(5)	15	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	--	ND(5)	--	43	ND(5)	ND(5)	ND(5)	15	--	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	ND(5)	ND(5)	ND(5)	ND(5)	--	3.2 J	ND(5)	ND(5)	ND(5)	8.8	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(100)	ND(100)	ND(100)	ND(100)	--	11	ND(100)	ND(100)	ND(100)	48 J	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	5 J	6.2	ND(5)	ND(5)	ND(5)	15	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	--	--	ND(7.1)	6.6 J	4	--	--	ND(7.1)	3.9 J	--	--	--
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/28/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	0													

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	2-Chloronaphthalene (µg/L)	2-Chlorophenol (µg/L)	2-Methylnaphthalene (µg/L)	2-Methylphenol (µg/L)	2-Nitroaniline (µg/L)	2-Nitrophenol (µg/L)	3,3'-Dichlorobenzidine (µg/L)	3,4-Methylphenol (µg/L)	3-Nitroaniline (µg/L)	2-Methyl-4,6-dinitrophenol (µg/L)	4-Bromophenylphenylether (µg/L)	4-Chloro-3-Methylphenol (µg/L)	4-Chloroaniline (µg/L)	4-Chlorophenylphenylether (µg/L)
	Cleanup Levels		733	91	35.1	NA	190	NA	1.25	NA	NA	1.52	NA	NA	0.37	NA
Evaporation Ponds	EP-11	2/20/21	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4/20/21	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-12A	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	90	ND(2.5)	ND(2.5)	ND(2.5)	93	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-12A	12/22/20	ND(11.5) UJ	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5) UJ	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5) UJ	ND(11.5)	ND(11.5)	ND(11.5) UJ
Evaporation Ponds	EP-12A	2/20/21 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	94	ND(2.5)	5.6	ND(2.5)	160	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-12B	09/18/20	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(23.3) UJ	ND(23.3)	--	ND(23.3)	ND(23.3)	ND(23.3) UJ	ND(23.3)	--	ND(23.3)	ND(23.3)	ND(23.3) UJ	ND(23.3)	ND(23.3)	ND(23.3) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(500)	ND(500)	ND(20)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	09/22/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-2	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	09/18/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	09/18/20	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(5)	8.2 J	2.1 J	ND(5)	ND(5)	ND(5)	5.3	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	14 J	--	ND(5)	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(11.4)	ND(11.4)	--	ND(11.4)	ND(11.4)	ND(11.4) UJ	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4) UJ	ND(11.4)	ND(11.4)	ND(11.4) UJ
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(5)	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(5) R	ND(0.1)	ND(5) R	ND(5)	ND(5) R	ND(5)	ND(5) R	ND(5)	ND(5) R	ND(5)	ND(5) R	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	ND(0.1)	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(5)	6.2 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	6 J	--	ND(5)	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(10.2)	ND(10.2)	--	ND(10.2)	ND(10.2)	ND(10.2) UJ	ND(10.2)	--	ND(10.2)	ND(10.2)	ND(10.2) UJ	ND(10.2)	ND(10.2)	ND(10.2) UJ
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(5)	80	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(5)	ND(5)	67 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(5)	ND(5)	68 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	71	--	2.3 J	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	ND(5)	ND(5)	3.8 J	ND(5)	17	ND(5)	ND(5)	11 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(100)	ND(100)	15	36 J	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(5)	ND(5)	8	12	ND(5)	ND(5)	ND(5)	6.1	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-11	12														

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	4-Nitroaniline (µg/L)	4-Nitrophenol (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Aniline (µg/L)	Anthracene (µg/L)	Azobenzene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(ghi)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Benzoic Acid (µg/L)	Benzyl Alcohol (µg/L)	Bis(chloroethoxy)methane (µg/L)
Cleanup Levels			3.8	NA	535	NA	13	1,721	0.12	0.12	0.2	0.34	NA	3.43	75,000	2,000	59
Evaporation Ponds	EP-11	202021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)
Evaporation Ponds	EP-12A	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(0.5)	ND(2.5)
Evaporation Ponds	EP-12A	12/22/20	ND(11.5)	ND(11.5)	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) R	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(34.6) UJ	ND(11.5)	ND(11.5)
Evaporation Ponds	EP-12A	202021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(2.5)	6.4	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-12B	09/18/20	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	--	ND(0.46) UJ	ND(0.46) UJ	ND(0.46) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(23.3)	ND(23.3)	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) R	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)
Evaporation Ponds	EP-12B	06/21/21	ND(500)	ND(500)	ND(20)	ND(20)	ND(500)	ND(20)	ND(500)	ND(20)	ND(14)	ND(20)	ND(20)	ND(20)	ND(500)	ND(500)	ND(500)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	6.6	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	09/22/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.51)	ND(0.51)	ND(0.51)	0.77	ND(0.51)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	6.8	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-2	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	09/18/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.51)	ND(0.51)	1.1/ND(1.1) U*	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	6.5	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	09/18/20	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	--	ND(0.1) UJ	ND(0.1) UJ	ND(0.1) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	7	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.51)	ND(0.51)	3.3	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(5)	ND(5)	0.2	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(200)	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	6.5	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	6.5	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	6.4	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	--	ND(0.11) UJ	ND(0.11) UJ	ND(0.11) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	0.49 J	ND(0.57) UJ
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(5)	ND(0.7)	ND(1)	ND(1)	ND(1)	ND(20)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	0.54 J	ND(0.1)	ND(5)	ND(0.1) UJ	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4) R	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(34.1)	ND(11.4)	ND(11.4)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(5)	0.4 J	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(5) R	0.48	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(5)	1.6	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(5)	ND(0.7)	ND(1)	ND(1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	1.1 J	--	ND(5)	0.44 J	--	ND(0.1)	--	ND(0.1)	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2) R	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(30.5)	ND(10.2)	ND(10.2)
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(5)	0.8 J	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(5)	ND(0.7)	ND(1)	ND(1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(5)	ND(5)	2	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(5)	ND(0.7)	ND(1)	ND(1)	13	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(5)	ND(5)	1.4	ND(1)	ND(5)	1.7 J	ND(5)	ND(1)	ND(5)	ND(0.7)	ND(1)	ND(1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	ND(1)	--	ND(5)	4									

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bis(2-chloroethyl)ether (µg/L)	Bis(2chloroisopropyl)ether (µg/L)	Bis(2-ethylhexyl)phthalate (µg/L)	Benzyl Butyl Phthalate (µg/L)	Carbazole (µg/L)	Chrysene (µg/L)	Dibenz(a,h)anthracene (µg/L)	Dibenzofuran (µg/L)	Diethylphthalate (µg/L)	Dimethyl Phthalate (µg/L)	Di-n-butylphthalate (µg/L)	Di-n-octylphthalate (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Hexachloro Benzene (µg/L)
	Cleanup Levels		0.137	9.81	55.64	16	NA	34.3	0.034	NA	14,861	612	885	200	802	288	0.0976
Evaporation Ponds	EP-11	2/20/2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4/20/2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-12A	11/21/19	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5) UJ	ND(11.5)	ND(11.5) UJ	ND(11.5)	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ	ND(11.5) UJ
Evaporation Ponds	EP-12A	2/20/2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	--	ND(2.5)	27	ND(2.5)	ND(2.5)	ND(2.5)	ND(0.125)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-12B	09/18/20	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(0.14) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ
Evaporation Ponds	EP-12B	12/22/20	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3) UJ	ND(23.3)	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ	ND(23.3) UJ
Evaporation Ponds	EP-12B	06/21/21	ND(500)	ND(500)	ND(1000)	ND(500)	ND(500)	ND(20)	ND(20)	ND(500)	ND(1000)	ND(1000)	ND(1000)	ND(2000)	ND(40)	ND(20)	ND(500)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	09/22/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.03)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-2	09/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	09/18/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.03)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	09/18/20	ND(0.51) UJ	ND(0.51) UJ	0.28 J	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.03) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	12/06/18	ND(0.5)	ND(0.5)	1.1	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	ND(10)	ND(10)	18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.031)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	ND(100)	--	--	--	--	--	ND(100)	ND(100)	--	ND(200)	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(0.51)	ND(0.51)	0.23 J	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.031)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.034) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(2)	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	ND(10)	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	0.82 J	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4) UJ
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(5)	6.7J/ND(10)U*	ND(5)	ND(5)	ND(1)	ND(1)	2.2 J	ND(10)	ND(10)	ND(10)	9.6J/ND(10)U*	ND(2)	1.4	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(5)	5.7J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	0.48	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	3.1 J	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(2)	1.8	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	--	1.4	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2) UJ
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(5)	7.5J/ND(10)U*	ND(5)	5.6	ND(5)	ND(1)	3 J	ND(10)	ND(10)	7.8J/ND(10)U*	ND(10)	ND(2)	2.6	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(5)	ND(5)	4.6J/ND(10)U*	ND(5)	5.8	ND(1)	ND(1)	3.3 J	ND(10)	ND(10)	ND(10)	ND(20)	ND(2)	3.6	ND(5)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	5.5	ND(1)	ND(1)	2.2 J	ND(10)	ND(10)	ND(10)				

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Hexachlorobutadiene (µg/L)	Hexachlorocyclopentadiene (µg/L)	Hexachloroethane (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Isophorone (µg/L)	Naphthalene (µg/L)	Nitrobenzene (µg/L)	N-Nitrosodimethylamine (µg/L)	N-Nitrosodi-n-propylamine (µg/L)	N-Nitrosodiphenylamine (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Phenol (µg/L)	Pyrene (µg/L)	Pyridine (µg/L)
	Cleanup Levels		0.14	0.41	3.28	0.343	781	30	1.4	0.0049	0.011	122	1	170	5,761	117	20
Evaporation Ponds	EP-11	2/20/21	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4/20/21	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(100)	ND(50)	ND(50)	ND(50)	ND(50)
Evaporation Ponds	EP-12A	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-12A	12/22/20	--	ND(23.1) UJ	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)	ND(23.1)	ND(11.5)	ND(11.5)	ND(11.5)	ND(11.5)
Evaporation Ponds	EP-12A	2/20/21	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(2.5)	ND(2.5)	ND(2.5)	ND(1)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)	--	--	ND(2.5)	ND(2.5)	560	ND(2.5)	ND(2.5)
Evaporation Ponds	EP-12B	09/18/20	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(0.91) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ
Evaporation Ponds	EP-12B	12/22/20	--	ND(46.6) UJ	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)	ND(46.6)	ND(23.3)	ND(23.3)	ND(23.3)	ND(23.3)
Evaporation Ponds	EP-12B	06/21/21	ND(500)	ND(500)	ND(500)	ND(60)	ND(500)	ND(20)	ND(500)	ND(500)	ND(500)	ND(500)	ND(2000)	ND(20)	ND(500)	ND(40)	ND(500)
Evaporation Ponds	EP-12B	4/20/21	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-1	09/22/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.2)	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-2	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-2	09/18/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-4	09/18/20	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.2) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	MW-5	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	--
Land Treatment Unit Wells	OW-67	09/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1) UJ	ND(5) UJ	ND(0.2)	ND(5)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	--
Land Treatment Unit Wells	OW-68	09/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1) UJ	ND(5) UJ	0.18JND(0.2)U*	ND(5)
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(50)	--
Land Treatment Unit Wells	SMW-2	09/11/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/18/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Land Treatment Unit Wells	SMW-4	09/20/20	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.23) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	ND(0.2)	--
Marketing Tank Farm Wells	MKTF-01	4/20/20 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	21 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(1) UJ	92 J	ND(2)	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	--	--	--	11 J	--	--	--	--	0.36 J	34	ND(0.2)	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	--	ND(22.7)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(22.7)	0.36 J	20.1	ND(11.4)	ND(11.4) R
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	5.4	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(1)	18	ND(2)	ND(5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	2.5	ND(5)	ND(5)	ND(5)	ND(5)	ND(20) R	0.16	1.9 J	0.26	ND(5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1) UJ	0.76 J	ND(0.2)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5)	ND(0.2)	--
Marketing Tank Farm Wells	MKTF-03	4/20/20 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4/20/20 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	15 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(1) UJ	8.3 J	ND(2)	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	--	--	--	12 J	--	--	--	--	--	1.5 J	1.5 J	0.26	--
Marketing Tank Farm Wells	MKTF-05	4/20/20 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4/20/20 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4/20/20 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4/20/20 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4/20/20 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	--	ND(20.3)	ND(10.2)	ND(10.2)	ND(10.2)	104 J	ND(10.2)	ND(10.2)	ND(10.2)	ND(10.2)	ND(20.3)	ND(10.2)	30.1	ND(10.2)	ND(10.2) R
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	140	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	1	33	ND(2)	ND(5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	120 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	2.6	27	2.4	ND(5)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	110 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	1.6	26	ND(2)	ND(5)
Marketing Tank Farm Wells	MKTF-10	12/16/21</															

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Benzidine (µg/L)	2,3,4,6-Tetrachlorophenol (µg/L)	2,3,5,6-Tetrachlorophenol (µg/L)	Dibenz(a,h)acridine (µg/L)	7,12-Dimethylbenz(a)anthracene (µg/L)	1,2-Diphenylhydrazine (µg/L)	Quinoline (µg/L)	Thiophenol (Benzene thiol) (µg/L)
	Cleanup Levels		0.0011	240	NA	NA	0.0001	0.780	0.024	NA
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12A	11/21/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12A	12/22/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	09/18/20	ND(2.3) UJ	ND(2.3) UJ	ND(2.3) UJ	--	--	--	--	--
Evaporation Ponds	EP-12B	12/22/20	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	06/21/21	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/22/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/29/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-2	08/13/19	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/18/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/18/20	ND(0.51) UJ	ND(0.51) UJ	ND(0.51) UJ	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/29/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	12/23/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	12/23/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/18/18	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	08/22/19	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/19/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	12/06/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/20/20	ND(0.57) UJ	ND(0.57) UJ	ND(0.57) UJ	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	03/10/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	06/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02R	09/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	03/10/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	06/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	09/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	06/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	09/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/28/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18	12/16/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18	06/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18R	09/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	--	--	--	--	--	--	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,4-Dioxane (µg/L)	1-Methylnaphthalene (µg/L)	2,4,5-Trichlorophenol (µg/L)	2,4,6-Trichlorophenol (µg/L)	2,4-Dichlorophenol (µg/L)	2,4-Dimethylphenol (µg/L)	2,4-Dinitrophenol (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)
Cleanup Levels			70	600	NA	75	4.59	11.38	1,166	11.9	45.3	354	38.7	2.38	0.485
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	6.1 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(5)	ND(5)	ND(5)	ND(5)	--	2.8	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	--	ND(5)	15	2.3	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	--	ND(5)	14	4.9	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	--	--	ND(11.2)	ND(11.2) UJ	ND(11.2) UJ	ND(11.2)	ND(33.6)	ND(11.2) UJ	ND(11.2)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(5)	ND(5)	ND(5)	ND(5)	--	0.28	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	0.32	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	--	ND(5)	52	0.26	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	--	ND(5)	52	0.26	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	--	--	ND(12.3) UJ	ND(12.3) UJ	ND(12.3) UJ	ND(12.3)	ND(37)	ND(12.3) UJ	ND(12.3)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	2.8 J	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	--	ND(5)	4.6	ND(0.1)	--	ND(5)	--	ND(5)	--	ND(5)	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	--	--	ND(12.1)	ND(12.1) UJ	ND(12.1) UJ	ND(12.1)	ND(36.3)	ND(12.1) UJ	ND(12.1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	0.22 J	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	--	ND(5)	0.46 J	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(11)	ND(11)	ND(11)	ND(11)	--	--	ND(11)	ND(11)	ND(11)	ND(11)	ND(33.1)	ND(11)	ND(11)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	2.2	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	--	ND(5)	2.6	ND(0.1)	--	ND(5) R	--	ND(5) R	--	--	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	--	--	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(33.7)	ND(11.2)	ND(11.2)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(5)	ND(5)	ND(5)	ND(5)	13	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	--	ND(5)	15	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	--	--	ND(11.6)	ND(11.6) UJ	ND(11.6) UJ	ND(11.6)	ND(34.7)	ND(11.6) UJ	ND(11.6)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	--	ND(5)	58	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	--	ND(5)	60	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	--	--	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(32.8)	ND(10.9)	ND(10.9)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	--	ND(5) UJ	27	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	--	ND(5)	36	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(5)	ND(5)	ND(5)	ND(5)	--	0.28 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	--	ND(5) UJ	1.9	0.34	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	--	ND(5)	2.4	0.32	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(5)	ND(5)	ND(5)	ND(5)	1.2 J	5.1	ND(5)	ND(5)	ND(5)	5.5	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(5)	ND(5)	ND(5)	ND(5)	1.9 J	4.8	ND(5)	ND(5)	ND(5)	5.8	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	--	1.5 J	ND(10)	4.6	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	--	ND(5)	1.4	7.1	ND(5)	ND(5)	--	3 J	--	--	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(25)	ND(25)	ND(25)	ND(25)	4.4 J	250	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(5)	ND(5)	ND(5)	ND(5)	0.48 J	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(5)	ND(5)	ND(5)	ND(5)	0.52 J	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	--	ND(5)	0.48 J	0.5	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	--	ND(5)	1.3	4.5	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	--	--	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(33.9) UJ	ND(11.3)	ND(11.3)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	--	--	ND(11.3)	ND(11.3) UJ	ND(11.3) UJ	ND(11.3)	ND(33.8)	ND(11.3) UJ	ND(11.3)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	--	ND(5)	6.7	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	--	ND(5)	8	ND(0.1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	--	--	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(32.6)	ND(10.9)	ND(10.9)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(5)	ND(5)	ND(5)	ND(5)	--	2.4JD/ND(3)U*	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	--	ND(5) UJ	1.2 J	2.4	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	--	--	ND(5.2) R	1.5	5.1	--	ND(5.2) R	--	ND(5.2) R	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(55.1)	ND(55.1)	ND(55.1)	ND(55.1)	--	--	ND(55.1)	ND(55.1)	ND(55.1)	ND(55.1)	ND(165) UJ	ND(55.1)	ND(55.1)
Marketing Tank Farm Wells	MKTF-42	03/04/21	ND(50)	ND(50)	ND(50)	ND(50)	--	12 J	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-42	06/15/21	ND(50)	ND(50)	ND(50)	ND(50)	--	ND(5)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	--	--	ND(50) UJ	3.2 J	9.8 J	--	ND(50)	--	ND(50)	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	--	--	ND(5)	ND(10)	ND(1)	--	ND(5)	--	ND(5)	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/15/20	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(11.4) R	--	--	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(34.2) R	ND(11.4) R	ND(11.4) R
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.3) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-43	06/24/21	ND(5)	ND(5)	ND(5)	ND(5)	--	0.34	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5) R
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	--	--	ND(5)	ND(1)	ND(0.1)	--	ND(5) R	--	ND(5) R	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	--	--	ND(5)	ND(1)	ND(0.1)	--	ND(5) R	--	ND(5) R	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(12.2) UJ	ND(12.2)	ND(12.2)	ND(12.2)	--	--	ND(12.2) UJ	ND(12.2) UJ	ND(12.2) UJ	ND(12.2)	ND(36.5)	ND(12.2) UJ	ND(12.2) UJ
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(23)	ND(23)	ND(23)	ND(23)	--	ND(0.5)	ND(23)	ND(23)	ND(23)	ND(23)	ND(23)	ND(23)	ND(23)
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(5)	ND(5)	ND(5)	ND									

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	2-Chloronaphthalene (µg/L)	2-Chlorophenol (µg/L)	2-Methylnaphthalene (µg/L)	2-Methylphenol (µg/L)	2-Nitroaniline (µg/L)	2-Nitrophenol (µg/L)	3,3'-Dichlorobenzidine (µg/L)	3,4-Methylphenol (µg/L)	3-Nitroaniline (µg/L)	2-Methyl-4,6-dinitrophenol (µg/L)	4-Bromophenylphenylether (µg/L)	4-Chloro-3-Methylphenol (µg/L)	4-Chloroaniline (µg/L)	4-Chlorophenylphenylether (µg/L)
	Cleanup Levels		733	91	35.1	NA	190	NA	1.25	NA	NA	1.52	NA	NA	0.37	NA
Marketing Tank Farm Wells	MKTFF-24	03/09/21	ND(5)	ND(5)	0.12 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-24	06/16/21	ND(5)	ND(5)	0.18	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-24	09/21/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-24	12/16/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-25	03/05/21	ND(11.2)	ND(11.2)	ND(0.1)	ND(5)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(5)	ND(11.2)	ND(11.2) UJ	ND(11.2) UJ	ND(11.2)	ND(5)	ND(11.2) UJ
Marketing Tank Farm Wells	MKTFF-25	06/17/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-25	09/21/21	--	--	0.14	ND(5)	--	--	--	ND(5)	--	--	--	--	--	ND(5)
Marketing Tank Farm Wells	MKTFF-25	12/17/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-27	12/18/20	ND(12.3)	ND(12.3)	--	ND(12.3)	ND(12.3) UJ	ND(12.3) UJ	ND(12.3)	--	ND(12.3)	ND(12.3)	ND(12.3) UJ	ND(12.3)	ND(12.3)	ND(12.3) UJ
Marketing Tank Farm Wells	MKTFF-27	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-27	06/16/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-27	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-27	12/14/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-28	12/18/20	ND(12.1)	ND(12.1)	--	ND(12.1)	ND(12.1) UJ	ND(12.1) UJ	ND(12.1)	--	ND(12.1)	ND(12.1)	ND(12.1) UJ	ND(12.1)	ND(12.1)	ND(12.1) UJ
Marketing Tank Farm Wells	MKTFF-28	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-28	06/16/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-28	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-28	12/14/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-29	12/15/20	ND(11) UJ	ND(11)	--	ND(11)	ND(11)	ND(11)	ND(11)	--	ND(11)	ND(11) UJ	ND(11)	ND(11)	ND(11)	ND(11)
Marketing Tank Farm Wells	MKTFF-29	03/08/21	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-29	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-29	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-29	12/14/21	--	--	ND(0.1)	ND(5) R	--	--	ND(5) R	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-30	12/15/20	ND(11.2) UJ	ND(11.2)	--	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	--	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)
Marketing Tank Farm Wells	MKTFF-30	03/09/21	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-30	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-30	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-30	12/14/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-31	12/18/20	ND(11.6)	ND(11.6)	--	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6)	--	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6) UJ
Marketing Tank Farm Wells	MKTFF-31	03/08/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-31	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-31	09/16/21	--	--	ND(0.1)	ND(5)	--	--	ND(5)	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-31	12/16/21	--	--	ND(0.1)	ND(5)	--	--	ND(5)	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-32	12/15/20	ND(10.9) UJ	ND(10.9)	--	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	--	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)
Marketing Tank Farm Wells	MKTFF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-32	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-32	09/14/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-32	12/09/21	--	--	ND(0.1)	ND(5)	--	--	ND(5)	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-34	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-34	06/24/21	ND(5)	ND(5)	0.32 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-34	09/14/21	--	--	0.28	ND(5)	--	--	ND(5)	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-34	12/09/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-35	03/11/21	ND(5)	ND(5)	5.8	1.1 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-35	06/23/21	ND(5)	ND(5)	5.2	1.7 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-35	09/14/21	--	--	4.6	--	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-35	12/21/21	--	--	7.7	6.6	--	--	--	6.3	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-36	1Q2021	NS - SPH	NS - SPH	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-36	06/23/21	ND(25)	ND(25)	430	63	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTFF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-38	03/11/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-38	06/23/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-38	09/22/21	--	--	0.24	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-38	12/21/21	--	--	0.88	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-39	12/18/20	ND(11.3) UJ	ND(11.3)	--	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	--	ND(11.3)	ND(11.3) UJ	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)
Marketing Tank Farm Wells	MKTFF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-40	12/17/20	ND(11.3)	ND(11.3)	--	ND(11.3)	ND(11.3)	ND(11.3) UJ	ND(11.3)	--	ND(11.3)	ND(11.3) UJ	ND(11.3) UJ	ND(11.3)	ND(11.3) UJ	ND(11.3) UJ
Marketing Tank Farm Wells	MKTFF-40	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-40	06/17/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-40	09/21/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-40	12/17/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-41	12/15/20	ND(10.9) UJ	ND(10.9)	--	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	--	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)
Marketing Tank Farm Wells	MKTFF-41	03/04/21	ND(5)	ND(5)	3 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-41	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-41	09/14/21	--	--	2.6	ND(5)	--	--	ND(5)	--	ND(5)	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-41	12/09/21	--	--	7.2	ND(5.2) R	--	--	ND(5.2) R	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-42	12/16/20	ND(55.1) UJ	ND(55.1)	--	ND(55.1)	ND(55.1)	ND(55.1)	ND(55.1)	--	ND(55.1)	ND(55.1) UJ	ND(55.1)	ND(55.1)	ND(55.1)	ND(55.1)
Marketing Tank Farm Wells	MKTFF-42	03/04/21	ND(50)	ND(50)	ND(10) UJ	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTFF-42	06/15/21	ND(50)	ND(50)	ND(5)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Marketing Tank Farm Wells	MKTFF-42	09/14/21	--	--	4.4 J	ND(50)	--	--	ND(50)	--	ND(50)	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-42	12/09/21	--	--	ND(1)	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-43	12/15/20	ND(11.4) R	ND(11.4) R	--	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(11.4) R	--	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(11.4) R	ND(11.4) R
Marketing Tank Farm Wells	MKTFF-43	03/04/21	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-43	06/24/21	ND(5)	ND(5) R	0.42	ND(5)	ND(5)	ND(5) R	ND(5)	ND(5)	ND(5)	ND(5) R	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-43	09/23/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5) R	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-43	12/08/21	--	--	ND(0.1)	ND(5)	--	--	--	ND(5) R	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTFF-44	12/23/20	ND(12.2) UJ	ND(12.2)	--	ND(12.2)	ND(12.2) UJ	ND(12.2) UJ	ND(12.2)	--	ND(12.2)	ND(12.2)	ND(12.2) UJ	ND(12.2)	ND(12.2)	ND(12.2) UJ
Marketing Tank Farm Wells	MKTFF-44	03/1														

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	4-Nitroaniline (µg/L)	4-Nitrophenol (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Aniline (µg/L)	Anthracene (µg/L)	Azobenzene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(ghi)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Benzoic Acid (µg/L)	Benzyl Alcohol (µg/L)	Bis(2chloroethoxy)methane (µg/L)
Cleanup Levels			3.8	NA	535	NA	13	1,721	0.12	0.12	0.2	0.34	NA	3.43	75,000	2,000	59
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(5)	ND(5)	0.54 J	ND(0.1) UJ	ND(5)	ND(0.1) UJ	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	0.3	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	0.52	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) R	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(33.6)	ND(11.2)	ND(11.2)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(5)	ND(5)	0.1	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(5)	ND(5)	0.24	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	0.14	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	0.18	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3) R	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(37)	ND(12.3)	ND(12.3)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1) R	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(36.3)	ND(12.1)	ND(12.1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	ND(0.1) UJ	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(11)	ND(11) UJ	ND(11) UJ	ND(11)	ND(11)	ND(11)	ND(11) UJ	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(33.1) R	ND(11)	ND(11) UJ
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(5)	ND(5)	ND(0.1) UJ	ND(0.1) UJ	ND(5)	ND(0.1) UJ	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(11.2)	ND(11.2) UJ	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(33.7) R	ND(11.2)	ND(11.2) UJ
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(5)	ND(5)	ND(0.1) UJ	ND(0.1) UJ	ND(5)	ND(0.1) UJ	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(20)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6) R	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(34.7)	ND(11.6)	ND(11.6)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(10.9)	ND(10.9) UJ	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(32.8) R	ND(10.9)	ND(10.9) UJ
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	ND(0.1)	--	ND(5)	0.2	--	0.14	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(5)	ND(5)	1.7	ND(0.1)	ND(5)	0.34	ND(0.1)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(5)	ND(5)	1.8	ND(0.1)	ND(5)	0.4	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	1.8	--	ND(5)	ND(1)	--	ND(1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	2.3	--	ND(5)	0.46	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(25)	ND(25)	0.4	ND(1)	ND(25)	3.2	ND(1)	ND(25)	ND(0.7)	ND(1)	ND(1)	ND(1)	ND(25)	ND(25)	ND(25)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	0.28	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(11.3)	ND(11.3) UJ	ND(11.3) UJ	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3) UJ	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(33.9) R	ND(11.3)	ND(11.3) UJ
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(33.8)	ND(11.3)	ND(11.3)
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	ND(0.1)	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(10.9)	ND(10.9) UJ	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(32.6) R	ND(10.9)	ND(10.9) UJ
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(0.7)	ND(1)	ND(1)	ND(1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	0.34	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	ND(1)	--	ND(5)	ND(1)	--	ND(1)	--	--	--	--	ND(20)	ND(5)	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	--	ND(0.1)	--	ND(5.2) R	0.36	--	ND(0.1)	--	--	--	--	ND(		

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bis(2-chloroethyl)ether (µg/L)	Bis(2chloroisopropyl)ether (µg/L)	Bis(2-ethylhexyl)phthalate (µg/L)	Benzyl Butyl Phthalate (µg/L)	Carbazole (µg/L)	Chrysene (µg/L)	Dibenz(a,h)anthracene (µg/L)	Dibenzofuran (µg/L)	Diethylphthalate (µg/L)	Dimethyl Phthalate (µg/L)	Di-n-butylphthalate (µg/L)	Di-n-octylphthalate (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Hexachloro Benzene (µg/L)
	Cleanup Levels		0.137	9.81	55.64	16	NA	34.3	0.034	NA	14,861	612	885	200	802	288	0.0976
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(5)	ND(5)	6.8J/ND(10)U*	ND(5)	4.1 J	ND(0.1)	ND(0.1)	2.2 J	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-24	06/10/21	ND(5)	ND(5)	4.8J/ND(10)U*	ND(5)	4.5 J	ND(0.1)	ND(0.1)	2.6 J	ND(10)	ND(10)	ND(10)	ND(20)	0.26	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	ND(10)	ND(5)	3.8 J	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(5)	ND(5)	4.9J/ND(10)U*	ND(5)	3.4 J	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(5)	ND(5)	5.2J/ND(10)U*	ND(5)	4.2 J	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	ND(10)	ND(5)	3.7 J	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3) UJ
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(5)	ND(5)	5.3J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1) UJ	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1) UJ
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(5)	ND(5)	5.8J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	6.5 J	ND(0.2)	ND(0.1)
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1) UJ	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(11)	ND(11)	ND(11)	ND(11)	ND(11) UJ	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11) UJ	ND(11)	ND(11)	ND(11)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(5)	ND(5)	7.5J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	7.2 J	ND(10)	ND(0.2)	ND(0.1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(5)	ND(5)	4.5J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1) UJ	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2)	ND(11.2)
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(5)	ND(5)	9.2J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	6.8 J	ND(10)	ND(0.2)	ND(0.1) UJ	ND(5)
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	6.7 J	ND(0.2)	ND(0.1)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1) UJ	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6) UJ
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(5)	6.3J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(5)	ND(5)	4.6J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	6.6 J	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	ND(10)	ND(5)	ND(5)	0.08 J	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(5)	ND(5)	ND(10)	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(5)	ND(5)	7.1J/ND(10)U*	ND(5)	3.9 J	ND(0.1)	ND(0.1)	ND(10)	ND(10)	ND(10)	6.7J/ND(10)U*	9.2J/ND(10)U*	ND(0.2)	0.26	ND(5)
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(5)	ND(5)	5.5J/ND(10)U*	ND(5)	4 J	ND(0.1)	ND(0.1)	3.4 J	ND(10)	ND(10)	ND(10)	ND(10)	0.26	0.38	ND(5)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	ND(10)	ND(5)	4 J	ND(1)	--	2.2 J	ND(10)	ND(10)	--	ND(20)	--	ND(1)	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	0.58	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(25)	ND(25)	37J/ND(50)U*	ND(25)	ND(25)	ND(1)	ND(1)	ND(25)	ND(50)	ND(50)	ND(50)	ND(50)	33 J	15	ND(25)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(5)	ND(5)	6.9J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	6.7J/ND(10)U*	9.2J/ND(10)U*	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(5)	ND(5)	4.8J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	0.42	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	24.6 J	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	16.7	ND(11.3)
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3) UJ
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(5)	ND(5)	4.6J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(5)	ND(5)	4.9J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	ND(10)	ND(5)	ND(5)	ND(0.1)	--	ND(5)	ND(10)	ND(10)	--	ND(20)	--	ND(0.1)	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9)	ND(10.9)
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(5)	ND(5)	5.1J/ND(10)U*	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(10)	ND(10)	3.2 J	ND(10)	ND(1)	ND(1)	ND(5)
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(5)	ND(5)	4.5J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)</						

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Hexachlorobutadiene (µg/L)	Hexachlorocyclopentadiene (µg/L)	Hexachloroethane (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Isophorone (µg/L)	Naphthalene (µg/L)	Nitrobenzene (µg/L)	N-Nitrosodimethylamine (µg/L)	N-Nitrosodi-n-propylamine (µg/L)	N-Nitrosodiphenylamine (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Phenol (µg/L)	Pyrene (µg/L)	Pyridine (µg/L)	
			Cleanup Levels	0.14	0.41	3.28	0.343	781	30	1.4	0.0049	0.011	122	1	170	5,761	117	20
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	1.4 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1) UJ	28	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-24	06/16/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.7	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	0.14	27	0.26	ND(5)	
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	--	--	--	0.56	--	--	--	--	ND(20)	ND(0.1)	24	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	--	--	--	1.4	--	--	--	--	--	ND(0.1)	46	--	--	
Marketing Tank Farm Wells	MKTF-25	12/18/20	--	ND(22.4)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(22.4)	ND(11.2)	21.4	ND(11.2)	ND(11.2) R	
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.18	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	8.4	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.36	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	0.14	16	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	--	--	--	0.22	--	--	--	--	ND(20)	ND(0.1)	8.7	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	--	--	--	0.3	--	--	--	--	--	ND(0.1)	16	0.2	--	
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-27	12/18/20	--	ND(24.7)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3)	ND(24.7)	ND(12.3)	ND(12.3)	ND(12.3)	ND(12.3) R	
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-27	06/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	0.16 J	ND(5)	
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5)	ND(0.2) UJ	--	
Marketing Tank Farm Wells	MKTF-28	12/18/20	--	ND(24.2)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1)	ND(24.2)	ND(12.1)	ND(12.1)	ND(12.1)	ND(12.1) R	
Marketing Tank Farm Wells	MKTF-28	03/05/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-28	06/16/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.18	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5)	ND(0.2) UJ	--	
Marketing Tank Farm Wells	MKTF-29	12/15/20	--	ND(22) UJ	ND(11)	ND(11)	ND(11) UJ	ND(11) UJ	ND(11) UJ	ND(11) UJ	ND(11) UJ	ND(11) UJ	ND(22) UJ	ND(11)	ND(11) UJ	ND(11)	ND(11) UJ	
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-29	06/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	0.16 J	ND(5)	
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	--	--	--	ND(0.1)	--	--	--	--	ND(20) R	ND(5) R	ND(0.2) UJ	ND(5) UJ	ND(5) UJ	
Marketing Tank Farm Wells	MKTF-30	12/15/20	--	ND(22.4) UJ	ND(11.2)	ND(11.2)	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(11.2) UJ	ND(22.4) UJ	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(11.2) UJ	
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	0.26	ND(5)	
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	--	--	--	ND(0.1)	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2) UJ	ND(5) UJ	
Marketing Tank Farm Wells	MKTF-31	12/18/20	--	ND(23.1)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(23.1)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6) R	
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	--	--	--	ND(0.1)	--	--	--	--	ND(20) UJ	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	ND(0.1)	ND(5)	ND(0.2)	--	
Marketing Tank Farm Wells	MKTF-32	12/15/20	--	ND(21.8) UJ	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9) UJ	ND(10.9) UJ	ND(10.9) UJ	ND(10.9) UJ	ND(21.8) UJ	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9) UJ	
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	NS - SPH	ND(5)	
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	--	--	--	0.04 J	--	--	--	--	ND(20)	ND(0.1)	ND(5)	0.16 J	ND(5)	
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	--	--	--	ND(0.1)	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5) UJ	
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-34	06/24/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.2 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	0.22	ND(5)	
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	--	--	--	0.14 J	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	--	--	--	0.2	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5) UJ	
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-35	03/11/21	ND(5)	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	39	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	41 J	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	35	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	0.28 J	54	0.3	ND(5)	
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	--	--	--	29 J	--	--	--	--	ND(20)	ND(1)	57	ND(2)	2.3 J	
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	--	--	--	69	--	--	--	--	--	0.28	52	0.24	--	
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-36	06/23/21	ND(25)	ND(25)	ND(25)	ND(25)	ND(25)	50 J	ND(25)	ND(25)	ND(25)	ND(25)	ND(100)	15	47	3.4	ND(25)	
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(5)	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-38	06/23/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	--	--	--	0.32	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	--	--	--	3	--	--	--	--	--	0.22	ND(5)	ND(0.2)	--	
Marketing Tank Farm Wells	MKTF-39	12/16/20	--	ND(22.6) UJ	ND(11.3)	ND(11.3)	ND(11.3) UJ	31.5 J	ND(11.3) UJ	ND(11.3) UJ	ND(11.3) UJ	ND(11.3) UJ	ND(22.6) UJ	21.2	ND(11.3) UJ	ND(11.3)	ND(11.3) UJ	
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	
Marketing Tank Farm Wells	MKTF-40	12/17/20	--	ND(22.5)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	ND(22.5)	ND(11.3)	ND(11.3)	ND(11.3)	ND(11.3)	
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	--	--	--	ND(0.1)	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)	
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	--	--	--	0.14	--	--	--	--	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5) UJ	
Marketing Tank Farm Wells	MKTF-41	12/15/20	--	ND(21.8) UJ	ND(10.9)	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9) UJ	ND(10.9) UJ	ND(10.9) UJ	ND(10.9) UJ	ND(21.8) UJ	ND(10.9)	ND(10.9) UJ	ND(10.9)	ND(10.9) UJ	
Marketing Tank Farm Wells	MKTF-41	03/04/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	1.6JND(0.3)U*	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(1)	ND(5)	ND(2)	ND(5)	
Marketing Tank Farm Wells	MKTF-41	06/15/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	0.14	ND(5)	0.26	ND(5)	
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	--	--	--	1.8 J	--	--	--	--	ND(20)	ND(1)	ND(5)	ND(2)	ND(5)	
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	--	--	--	--	5.2	--	--	--	--	ND(21) R	0.14	ND(5.2) R	ND(0.2)	ND(5.2) R	
Marketing Tank Farm Wells	MKTF-42	12/16/20	--	ND(110) UJ	ND(55.1)	ND(55.1)	ND(55.1) UJ	ND(55.1) UJ	ND(55.1) UJ	ND(55.1) UJ	ND(55.1) UJ	ND(55.1) UJ	ND(110) UJ	ND(55.1) UJ	ND(55.1) UJ	ND(55.1) UJ	ND(55.1) UJ	
Marketing Tank Farm Wells	MKTF-42</																	

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Benzidine (µg/L)	2,3,4,6-Tetrachlorophenol (µg/L)	2,3,5,6-Tetrachlorophenol (µg/L)	Dibenz(a,h)acridine (µg/L)	7,12-Dimethylbenz(a)anthracene (µg/L)	1,2-Diphenylhydrazine (µg/L)	Quinoline (µg/L)	Thiophenol (Benzene thiol) (µg/L)
	Cleanup Levels		0.0011	240	NA	NA	0.0001	0.780	0.024	NA
Marketing Tank Farm Wells	MKTF-24	03/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	06/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	03/05/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	06/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	03/05/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	06/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	09/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	03/05/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	06/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	09/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	03/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	06/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	09/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	03/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	06/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	09/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	03/05/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	06/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	06/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	06/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	03/05/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	06/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	03/04/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	06/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/16/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	03/04/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	06/15/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/15/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	03/04/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	06/24/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	06/24/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	03/04/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	06/16/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,4-Dioxane (µg/L)	1-Methylnaphthalene (µg/L)	2,4,5-Trichlorophenol (µg/L)	2,4,6-Trichlorophenol (µg/L)	2,4-Dichlorophenol (µg/L)	2,4-Dimethylphenol (µg/L)	2,4-Dinitrophenol (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)
Cleanup Levels			70	600	NA	75	4.59	11.38	1,166	11.9	45.3	354	38.7	2.38	0.485
Marketing Tank Farm Wells	MKTFF-47	03/11/21	ND(5)	ND(5)	ND(5)	ND(5)	2.2	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-47	202021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTFF-47	402021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-48	402020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-49	12/23/20	ND(10.6) UJ	ND(10.6)	ND(10.6)	ND(10.6)	--	NS - SPH	ND(10.6) UJ	ND(10.6) UJ	ND(10.6) UJ	10.2	ND(31.7)	ND(10.6) UJ	ND(10.6) UJ
Marketing Tank Farm Wells	MKTFF-49	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	5.6	ND(5) R	ND(5) R	ND(5) R	ND(5) R	19.9	ND(5) R	ND(5) R	ND(5) R
Marketing Tank Farm Wells	MKTFF-49	202021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTFF-50	12/16/20	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	--	--	ND(11.6)	ND(11.6)	ND(11.6)	ND(34.9) UJ	ND(11.6)	ND(11.6)	ND(11.6)
Marketing Tank Farm Wells	MKTFF-50	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(50)	41	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTFF-50	202021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-2	09/18/17	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Production Wells	PW-2	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)
Production Wells	PW-2	12/28/20	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	--	--	ND(11.4)	ND(11.4)	ND(11.4)	ND(34.2)	ND(11.4)	ND(11.4)	ND(11.4)
Production Wells	PW-3	12/28/20	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	--	--	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)
Production Wells	PW-3	03/12/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Production Wells	PW-3	06/29/21	ND(5)	ND(5)	ND(5)	ND(5)	--	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Production Wells	PW-3	09/17/21	--	--	--	--	--	ND(5)	--	--	--	ND(5)	--	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	ND(0.1)	--	--	--	ND(5)	--	--	--
Production Wells	PW-4	12/28/20	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	--	--	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(27.9)	ND(9.3)	ND(9.3)
Production Wells	PW-4	03/12/21	ND(5)	ND(5)	ND(5)	ND(5)	--	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Production Wells	PW-4	06/29/21	ND(5)	ND(5)	ND(5)	ND(5)	--	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Production Wells	PW-4	09/17/21	--	--	--	--	--	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Production Wells	PW-4	12/28/21	--	--	--	--	--	ND(0.1) UJ	--	--	--	ND(5)	--	--	--
Solid Waste Management Unit 1 Wells	GWM-1	402020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	402020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	402020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(11)	ND(11)	ND(11)	ND(11)	--	--	ND(11)	ND(11)	ND(11) UJ	ND(11)	ND(32.9)	ND(11) UJ	ND(11)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	0.1 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	ND(5)	ND(5)	ND(5)	ND(5)	0.8 J	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	--	0.36 J	ND(0.1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	--	ND(10)	ND(1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	11	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	--	--	4.8	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	402020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	ND(5)	ND(5)	ND(5)	ND(5)	--	4.3	ND(5)	ND(5)	ND(5)	16	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-1	302021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	--	--	ND(10.6)	ND(10.6)	ND(10.6) UJ	ND(10.6)	ND(31.7)	ND(10.6) UJ	ND(10.6)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	3.6	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	ND(5)	ND(5)	ND(5)	ND(5)	2.5	20	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5) R	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	--	2 J	38	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	--	--	ND(11.2)	ND(11.2)	ND(11.2) UJ	ND(11.2)	ND(33.7)	ND(11.2) UJ	ND(11.2)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(5)	ND(5)	ND(5)	ND(5)	1.3 J	41	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(1)	3.3	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	--	0.32 J	5.6	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	--	ND(10)	3.4	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	--	--	ND(10.6)	ND(10.6)	ND(10.6) UJ	ND(10.6)	ND(31.8)	ND(10.6) UJ	ND(10.6)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(5) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(100)	ND(100)	ND(100)	ND(100)	1.4 J	0.52	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	--	--	--	ND(1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	--	1.8 J	ND(1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6)	2.2 J	ND(1)	ND(11.6) UJ	ND(11.6) UJ	ND(11.6) UJ	ND(11.6)	ND(34.7)	ND(11.6) UJ	ND(11.6) UJ
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	--	--	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(29.6)	ND(9.88)	ND(9.88)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.12)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	ND(5)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(13.3) UJ	ND(13.3)	ND(13.3)	ND(13.3)	--	--	ND(13.3) UJ	ND(13.3) UJ	ND(13.3) UJ	ND(13.3)	ND(40)	ND(13.3) UJ	ND(13.3) UJ
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(5)	ND(5)	ND(5)	ND(5)	--	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	ND(5)	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	402020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	102021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	202021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	Oil Sump LDU	402020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	102021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	09/16/21	--	--	--	--	--	--	--	--	--	ND(5)	--	--	--
Tank Farm Wells	OW-57	12/14/21	--	--	--	--	--	71	--	--	--	ND(5)	--	--	--
Tank Farm Wells	OW-58	12/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	09/16/21	--	--	--	--	--	--	--	--	--	ND(5)	--	--	--
Tank Farm Wells	OW-58	12/14/21	--	--	--	--	--	--	--	--	--	ND(5)	--	--	--
Tank Farm Wells	OW-58A	12/23/20	--	--	--	--	--	63	--						

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

[illegible]

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	4-Nitroaniline (µg/L)	4-Nitrophenol (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Aniline (µg/L)	Anthracene (µg/L)	Azobenzene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(ghi)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Benzoic Acid (µg/L)	Benzyl Alcohol (µg/L)	Bis(2chloroethoxy)methane (µg/L)
Cleanup Levels			3.8	NA	535	NA	13	1,721	0.12	0.12	0.2	0.34	NA	3.43	75,000	2,000	59
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-47	202021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-48	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	ND(10.6)	ND(10.6)	ND(10.6) UJ	ND(10.6) UJ	ND(10.6) R	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	163 J	ND(10.6)	ND(10.6)
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(5)	ND(5) R	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(0.7)	ND(1)	ND(1)	ND(1)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-49	202021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	ND(11.6)	ND(11.6) UJ	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(34.9) R	ND(11.6)	ND(11.6) UJ
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(3.5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-50	202021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-2	09/18/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	10	ND(10)	ND(10)
Production Wells	PW-2	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Production Wells	PW-2	12/28/20	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(34.2)	ND(11.4)	ND(11.4)
Production Wells	PW-3	12/28/20	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(32.1)	ND(10.7)	ND(10.7)
Production Wells	PW-3	03/12/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Production Wells	PW-3	08/29/21	ND(5)	ND(5)	ND(0.2)	ND(0.2)	ND(5)	ND(0.2)	ND(5)	ND(0.2)	ND(0.14)	ND(0.2)	ND(0.2)	ND(0.2)	ND(5)	ND(5)	ND(5)
Production Wells	PW-3	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Production Wells	PW-4	12/28/20	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(27.9)	ND(9.3)	ND(9.3)
Production Wells	PW-4	03/12/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(5)	ND(5)
Production Wells	PW-4	06/29/21	ND(5)	ND(5)	ND(0.2)	ND(0.2)	ND(5)	ND(0.2)	ND(5)	ND(0.2)	ND(0.14)	ND(0.2)	ND(0.2)	ND(0.2)	ND(5)	ND(5)	ND(5)
Production Wells	PW-4	09/17/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(32.9)	ND(11)	ND(11)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	ND(5)	ND(5)	0.14 J	ND(0.1) UJ	ND(5)	ND(0.1) UJ	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	ND(5)	ND(5)	0.2	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	0.12	--	ND(5)	ND(0.1)	--	ND(0.1)	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	ND(1)	--	ND(5)	ND(1)	--	ND(1)	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	08/23/21	ND(5)	ND(5)	ND(0.5)	ND(0.5)	ND(5)	ND(0.5)	ND(5)	ND(0.5)	ND(0.35)	ND(0.5)	ND(0.5)	ND(0.5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(31.7)	ND(10.6)	ND(10.6)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	ND(5)	ND(5)	2.3	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	ND(5)	ND(5) R	2.6	ND(0.1)	ND(5)	0.32	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	2.8	--	ND(5)	ND(1)	--	ND(1)	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	3.4	--	ND(5)	ND(1)	--	ND(1)	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(33.7)	ND(11.2)	ND(11.2)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	ND(5)	ND(5)	0.36 J	ND(0.1) UJ	ND(5)	0.2 J	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(5)	ND(5)	0.68	ND(0.1)	ND(5)	0.28	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	0.7	--	ND(5)	0.24	--	ND(0.1)	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	ND(1)	--	ND(5)	ND(1)	--	ND(1)	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(31.8)	ND(10.6)	ND(10.6)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(5)	ND(5)	ND(5) UJ	ND(5) UJ	ND(5)	ND(5) UJ	ND(5)	ND(5)	ND(3.5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(100)	ND(100)	ND(0.16)	ND(0.16)	ND(100)	ND(0.16)	ND(100)	ND(0.16)	ND(0.11)	ND(0.16)	ND(0.16)	ND(0.16)	ND(100)	ND(100)	ND(100)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	ND(1)	--	--	ND(1)	--	--	--	--	--	--	ND(200)	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	ND(1)	--	--	ND(1)	--	--	--	--	--	--	ND(200)	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6) UJ	ND(11.6) R	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(34.7) UJ	ND(11.6)	ND(11.6)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(23)	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(29.6)	ND(9.88)	ND(9.88)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(5)	ND(5)	ND(0.1) UJ	ND(0.1)	ND(5)	ND(0.1) UJ	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(5)	ND(5)	ND(0.12)	ND(0.12)	ND(5)	ND(0.12)	ND(5)	ND(0.12)	ND(0.088)	ND(0.12)	ND(0.12)	ND(0.12)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(13.3)	ND(13.3)	ND(13.3) UJ	ND(13.3) UJ	ND(13.3) R	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(40) UJ	ND(13.3)	ND(13.3)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(0.1)	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S													

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group	Location ID	Date Sampled	Bis(2-chloroethyl)ether (µg/L)	Bis(2chloroisopropyl)ether (µg/L)	Bis(2-ethylhexyl)phthalate (µg/L)	Benzyl Butyl Phthalate (µg/L)	Carbazole (µg/L)	Chrysene (µg/L)	Dibenz(a,h)anthracene (µg/L)	Dibenzofuran (µg/L)	Diethylphthalate (µg/L)	Dimethyl Phthalate (µg/L)	Di-n-butylphthalate (µg/L)	Di-n-octylphthalate (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Hexachloro Benzene (µg/L)
Cleanup Levels			0.137	9.81	55.64	16	NA	34.3	0.034	NA	14,801	612	885	200	802	288	0.0976
Marketing Tank Farm Wells	MKTf-47	03/11/21	ND(5)	ND(5)	6.4JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	9.2JND(10)J*	ND(0.2)	ND(0.1)	ND(5)
Marketing Tank Farm Wells	MKTf-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTf-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTf-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTf-49	12/23/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6) UJ	ND(10.6)	ND(10.6) UJ	ND(10.6)	ND(10.6) UJ	ND(10.6) UJ	ND(10.6) UJ	ND(10.6) UJ
Marketing Tank Farm Wells	MKTf-49	03/09/21	ND(5)	ND(5)	7.7JND(10)J*	ND(5)	3.9 J	ND(1)	ND(1)	2.1 J	ND(10)	ND(10)	8.1JND(10)J*	ND(10)	ND(2)	1.4	ND(5)
Marketing Tank Farm Wells	MKTf-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTf-50	12/16/20	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)
Marketing Tank Farm Wells	MKTf-50	03/09/21	ND(5)	ND(5)	8.8JND(10)J*	ND(5)	5.6	ND(5)	ND(5)	3.1 J	ND(10)	ND(10)	8.3JND(10)J*	ND(10)	ND(10)	7	ND(5)
Marketing Tank Farm Wells	MKTf-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-2	09/18/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	5.1	ND(10)	ND(10)	ND(10)
Production Wells	PW-2	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.031)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Production Wells	PW-2	12/28/20	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4) UJ	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)
Production Wells	PW-3	12/28/20	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)
Production Wells	PW-3	03/12/21	ND(5)	ND(5)	6.9JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Production Wells	PW-3	06/29/21	ND(5)	ND(5)	4.7JND(10)J*	ND(5)	ND(5)	ND(0.2)	ND(0.2)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.4)	ND(0.2)	ND(5)
Production Wells	PW-3	09/17/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Production Wells	PW-3	12/16/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Production Wells	PW-4	12/28/20	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3) UJ	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)
Production Wells	PW-4	03/12/21	ND(5)	ND(5)	6.9JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1)	ND(5)
Production Wells	PW-4	06/29/21	ND(5)	ND(5)	4.7JND(10)J*	ND(5)	ND(5)	ND(0.2)	ND(0.2)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.4)	ND(0.2)	ND(5)
Production Wells	PW-4	09/17/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Production Wells	PW-4	12/28/21	--	--	ND(10)	--	--	--	--	--	ND(10)	ND(10)	--	ND(20)	--	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11) UJ
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	ND(5)	ND(5)	7.4JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	2.1 J	ND(10)	ND(10)	ND(10)	ND(10)	ND(0.2)	ND(0.1) UJ	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	ND(5)	ND(5)	5.9JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	ND(0.1)	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	ND(1)	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	ND(5)	ND(5)	5.9JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.1)	1.4	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6) UJ
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	ND(5)	ND(5)	10ND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	2.2 J	ND(10)	ND(10)	7.1JND(10)J*	9.1JND(10)J*	ND(0.2)	0.46	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	ND(5)	ND(5)	5.3 J	ND(5)	4.2 J	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	1.7	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	3.2	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	4	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2) UJ
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	ND(5)	ND(5)	7.6JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	6.6 J	ND(10)	ND(0.2)	0.28 J	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(5)	ND(5)	4.6 J	ND(5)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	0.58	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	0.72	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	ND(1)	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6) UJ
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(5)	ND(5)	14 JB	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(10)	ND(10)	7.9 J	ND(10)	ND(10)	ND(5) UJ	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(100)	ND(100)	ND(200)	ND(100)	ND(100)	ND(0.16)	ND(0.16)	ND(100)	ND(200)	ND(200)	ND(200)	ND(400)	ND(0.32)	ND(0.16)	ND(100)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	ND(100)	--	--	--	--	--	--	--	--	ND(100)	--	ND(1)	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	ND(100)	--	--	--	--	--	--	--	--	ND(200)	--	ND(1)	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6)	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6) UJ	ND(11.6) UJ
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(5)	ND(5)	6.8JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	9.1JND(10)J*	ND(0.1)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(5)	ND(5)	4.9JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	ND(11)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(5)	ND(5)	4.7JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(0.2) UJ	ND(0.1) UJ	ND(0.1) UJ	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(5)	ND(5)	4.8JND(10)J*	ND(5)	ND(5)	ND(0.12)	ND(0.12)	ND(5)	ND(10)	ND(10)	6.8 J	ND(20)	ND(0.25)	ND(0.12)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3) UJ	ND(13.3)	ND(13.3) UJ	ND(13.3)	ND(13.3)	ND(13.3) UJ	ND(13.3) UJ	ND(13.3) UJ
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(5)	ND(5)	7.4JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	6.8JND(10)J*	9.1JND(10)J*	ND(0.2)	ND(0.1)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(5)	ND(5)	4.5JND(10)J*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(20)	ND(0.2)	ND(0.1)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	ND(10)	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S				

WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Hexachlorobutadiene (µg/L)	Hexachlorocyclopentadiene (µg/L)	Hexachloroethane (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Isophorone (µg/L)	Naphthalene (µg/L)	Nitrobenzene (µg/L)	N-Nitrosodimethylamine (µg/L)	N-Nitrosodi- n-propylamine (µg/L)	N-Nitrosodiphenylamine (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Phenol (µg/L)	Pyrene (µg/L)	Pyridine (µg/L)
Cleanup Levels			0.14	0.41	3.28	0.343	781	30	1.4	0.0049	0.011	122	1	170	5.761	117	20
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(5)	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)
Marketing Tank Farm Wells	MKTF-47	202021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/28/20	ND(21.1) UJ	ND(10.6)	ND(6)	ND(10.6)	ND(6)	44	ND(10.6)	ND(6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(5)	ND(5)	ND(5)	ND(5)	42	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Marketing Tank Farm Wells	MKTF-49	202021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	--	ND(23.2) UJ	ND(11.6)	ND(11.6)	ND(11.6) UJ	120	ND(11.6) UJ	ND(11.6)	ND(11.6)	ND(11.6) UJ	ND(11.6) UJ	ND(11.6)	25.8 J	ND(11.6)	ND(11.6) UJ
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(5)	ND(5)	ND(5)	ND(15)	ND(5)	71	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	8.3	ND(10)	ND(5)
Marketing Tank Farm Wells	MKTF-50	202021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-2	09/18/17	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Production Wells	PW-2	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.2)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)	ND(0.51)
Production Wells	PW-2	12/28/20	--	ND(22.8) UJ	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)	ND(11.4)
Production Wells	PW-3	12/28/20	--	ND(21.4) UJ	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)	ND(10.7)
Production Wells	PW-3	03/12/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.2)	ND(5)
Production Wells	PW-3	06/29/21	ND(5)	ND(5)	ND(5)	ND(0.6)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	0.52	ND(5)
Production Wells	PW-3	09/17/21	--	--	--	--	ND(5)	--	--	--	--	--	--	ND(5)	ND(5)	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	ND(0.1)	--	--	--	--	--	--	ND(0.1)	ND(5)	--	--
Production Wells	PW-4	12/28/20	--	ND(18.6) UJ	ND(9.3)	ND(9.3) UJ	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)	ND(9.3)
Production Wells	PW-4	03/12/21	ND(5)	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1)	ND(5)	ND(0.2)	ND(5)
Production Wells	PW-4	06/29/21	ND(5)	ND(5)	ND(5)	ND(0.6)	ND(5)	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.2)	ND(5)	ND(0.4)	ND(5)
Production Wells	PW-4	09/17/21	--	--	--	--	ND(5)	--	--	--	--	--	--	ND(5)	ND(5)	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	ND(0.1)	--	--	--	--	--	--	ND(0.1)	ND(5)	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	--	ND(21.9)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)	ND(11)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.12 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(0.2)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.18	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	--	--	0.1	--	--	--	--	--	ND(0.1)	ND(5)	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	--	--	ND(1)	--	--	--	--	--	ND(1)	ND(5)	--	--
LDU - East	LDU - East	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - East	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - East	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - East	LDU - East	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - East	LDU - East	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - West	LDU - West	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - West	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - West	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - West	LDU - West	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LDU - West	LDU - West	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	ND(5)	ND(5)	ND(5)	ND(1.5)	ND(5)	13	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	1	26	1.3	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	--	ND(21.1)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(21.1)	ND(10.6)	23	ND(10.6)	ND(10.6)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	3.1	ND(5)	ND(5)	ND(5)	ND(5)	ND(21.1)	ND(0.1)	14	ND(0.2)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	13	ND(5)	ND(5)	ND(5)	ND(5)	ND(20) R	0.34	24 J	0.26	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	--	--	25	--	--	--	--	--	ND(1)	19	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	--	--	26	--	--	--	--	--	ND(1)	30	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	--	ND(22.5)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)	ND(22.5)	ND(11.2)	ND(11.2)	ND(11.2)	ND(11.2)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	0.6 J	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	4.4 J	ND(0.2)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	2.1	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	0.26	3.3 J	0.26	ND(5)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	--	--	3.6	--	--	--	--	--	0.38	0.85 J	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	--	--	2.2	--	--	--	--	--	ND(1)	1.3 J	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	--	ND(21.2)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)	ND(21.2)	ND(10.6)	ND(10.6)	ND(10.6)	ND(10.6)
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(5)	ND(5)	ND(5)	ND(15)	ND(5)	ND(5) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5) UJ	ND(5)	ND(10)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(100)	ND(100)	ND(100)	ND(0.48)	ND(100)	ND(0.16)	ND(100)	ND(100)	ND(100)	ND(100)	ND(400)	ND(0.16)	ND(100)	ND(0.32)	ND(100)
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	--	--	--	ND(1)	--	--	--	--	--	ND(1)	ND(50)	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	--	--	ND(1)	--	--	--	--	--	ND(1)	ND(50)	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/17/20	--	ND(23.1) UJ	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)	ND(23.1)	ND(11.6)	ND(11.6)	ND(11.6)	ND(11.6)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(5)	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.2)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	ND(0.2)	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	--	ND(5.7) R	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(5)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	--	ND(19.8) R	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)	ND(19.8)	ND(9.88)	ND(9.88)	ND(9.88)	ND(9.88)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(5)	ND(5)	ND(5)	ND(0.3) UJ	ND(5)	ND(0.1) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.1) UJ	ND(5)	ND(0.2)	ND(5)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(5)	ND(5)	ND(5)	ND(0.38)	ND(5)	ND(0.12)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.12)	ND(5)	ND(0.25)	ND(5)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	--	ND(5)	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	ND(5)	--	--	--	--	--	--	ND(5)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	--	ND(26.7) UJ	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)	ND(26.7)	ND(13.3)	ND(13.3)	ND(13.3)	ND(13.3)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(0.1)	ND(5)	ND(0.2)	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	ND(0.1)	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	ND(0.1)	ND(5)	0.24	ND(5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	--	--	ND(0.1)	--	--	--	--	--	--	ND(5.1) R	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	ND(5)	--	--	--	--	--	--	ND(5)	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	12Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	202021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	Oil Sump LDU																

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Benzidine (µg/L)	2,3,4,6-Tetrachlorophenol (µg/L)	2,3,5,6-Tetrachlorophenol (µg/L)	Dibenz(a,h)acridine (µg/L)	7,12-Dimethylbenz(a)anthracene (µg/L)	1,2-Diphenylhydrazine (µg/L)	Quinoline (µg/L)	Thiophenol (Benzene thiol) (µg/L)
	Cleanup Levels		0.0011	240	NA	NA	0.0001	0.780	0.024	NA
Marketing Tank Farm Wells	MKTF-47	03/11/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-49	03/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-50	03/09/21	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-2	09/18/17	--	--	--	--	--	--	--	--
Production Wells	PW-2	09/21/20	ND(0.51)	ND(0.51)	ND(0.51)	--	--	--	--	--
Production Wells	PW-2	12/28/20	--	--	--	--	--	--	--	--
Production Wells	PW-3	12/28/20	--	--	--	--	--	--	--	--
Production Wells	PW-3	03/12/21	--	--	--	--	--	--	--	--
Production Wells	PW-3	06/29/21	--	--	--	--	--	--	--	--
Production Wells	PW-3	09/17/21	--	--	--	--	--	--	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/20	--	--	--	--	--	--	--	--
Production Wells	PW-4	03/12/21	--	--	--	--	--	--	--	--
Production Wells	PW-4	06/29/21	--	--	--	--	--	--	--	--
Production Wells	PW-4	09/17/21	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	03/12/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	06/23/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	09/16/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	12/14/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/22/20	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	03/12/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	06/23/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	09/16/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/14/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/23/20	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	03/12/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	06/23/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	09/16/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/14/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	03/03/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	06/15/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	09/29/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	12/17/21	--	--	--	--	--	--	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	1,2,4-Trichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,4-Dioxane (µg/L)	1-Methylnaphthalene (µg/L)	2,4,5-Trichlorophenol (µg/L)	2,4,6-Trichlorophenol (µg/L)	2,4-Dichlorophenol (µg/L)	2,4-Dimethylphenol (µg/L)	2,4-Dinitrophenol (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)
Cleanup Levels			70	600	NA	75	4.59	11.38	1,166	11.9	45.3	354	38.7	2.38	0.485
Tank Farm Wells	OW-64	12/11/20	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	--	--	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(28.2)	ND(9.41)	ND(9.41)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	ND(5)	ND(5)	--	2.4J/ND(3)U*	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(5)	ND(5)	ND(5)	ND(5)	--	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	09/23/21	--	--	--	--	--	0.87 J	--	--	--	2.2 J	--	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	--	--	--	1.8 J	--	--	--	ND(5)	--	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	ND(10)	ND(10)	ND(10)	ND(10)	--	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(20)	ND(10)	ND(10)
Western Boundary Wells	BW-4B	03/10/20	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.2)	ND(0.5)
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	--	--	--	--	0.48 J	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	--	--	--	--	2	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	2.2	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	2.3	--	--	--	--	--	--	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	2-Chloronaphthalene (µg/L)	2-Chlorophenol (µg/L)	2-Methylnaphthalene (µg/L)	2-Methylphenol (µg/L)	2-Nitroaniline (µg/L)	2-Nitrophenol (µg/L)	3,3'-Dichlorobenzidine (µg/L)	3,4-Methylphenol (µg/L)	3-Nitroaniline (µg/L)	2-Methyl-4,6-dinitrophenol (µg/L)	4-Bromophenylphenylether (µg/L)	4-Chloro-3-Methylphenol (µg/L)	4-Chloroaniline (µg/L)	4-Chlorophenylphenylether (µg/L)
	Cleanup Levels		733	91	35.1	NA	190	NA	1.25	NA	NA	1.52	NA	NA	0.37	NA
Tank Farm Wells	OW-64	12/11/20	ND(9.41)	ND(9.41)	--	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	--	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	ND(3) UJ	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(5)	ND(5)	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	09/23/21	--	--	0.39 J	ND(5)	--	--	--	4.1 J	--	--	--	--	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	0.58 J	ND(5)	--	--	--	ND(5)	--	--	--	--	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Western Boundary Wells	BW-4B	03/10/20	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.5)
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	4-Nitroaniline (µg/L)	4-Nitrophenol (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Aniline (µg/L)	Anthracene (µg/L)	Azobenzene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(ghi)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Benzoic Acid (µg/L)	Benzyl Alcohol (µg/L)	Bis(2chloroethoxy)methane (µg/L)
	Cleanup Levels		3.8	NA	535	NA	13	1,721	0.12	0.12	0.2	0.34	NA	3.43	75,000	2,000	59
Tank Farm Wells	OW-64	12/11/20	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(28.2)	ND(9.41)	ND(9.41)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(1)	ND(5)	ND(1)	ND(0.7)	ND(1)	ND(1)	ND(1)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(5)	ND(5)	0.22	ND(0.1)	ND(5)	0.3	ND(5)	ND(0.1)	ND(0.07)	ND(0.1)	ND(0.1)	ND(0.1)	ND(5)	ND(5)	ND(5)
Tank Farm Wells	OW-64	09/23/21	--	--	0.14	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	0.26	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(22)	--	--
Western Boundary Wells	BW-2A	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(22)	--	--
Western Boundary Wells	BW-2B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Western Boundary Wells	BW-2C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(200)	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Western Boundary Wells	BW-3C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(200)	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)
Western Boundary Wells	BW-4B	03/10/20	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.5)	NS(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--
Western Boundary Wells	BW-5C	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(25)	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	ND(20)	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Bis(2-chloroethyl)ether (µg/L)	Bis(2chloroisopropyl)ether (µg/L)	Bis(2-ethyhexyl)phthalate (µg/L)	Benzyl Butyl Phthalate (µg/L)	Carbazole (µg/L)	Chrysene (µg/L)	Dibenz(a,h)anthracene (µg/L)	Dibenzofuran (µg/L)	Diethylphthalate (µg/L)	Dimethyl Phthalate (µg/L)	Di-n-butylphthalate (µg/L)	Di-n-octylphthalate (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Hexachloro Benzene (µg/L)
	Cleanup Levels		0.137	9.81	55.64	16	NA	34.3	0.034	NA	14,861	612	885	200	802	288	0.0976
Tank Farm Wells	OW-64	12/11/20	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	6.3J/ND(10)U*	ND(5)	ND(5)	ND(1)	ND(1)	ND(5)	ND(10)	ND(10)	ND(10)	ND(10)	ND(2)	ND(1)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(5)	ND(5)	4.8J/ND(10)U*	ND(5)	ND(5)	ND(0.1)	ND(0.1)	ND(5)	ND(10)	ND(10)	ND(10)	6.7 J	0.42	0.36	ND(5)
Tank Farm Wells	OW-64	09/23/21	--	--	ND(10)	--	ND(5)	--	--	ND(5)	--	ND(10)	--	ND(20)	0.48	0.24	--
Tank Farm Wells	OW-64	12/29/21	--	--	ND(10)	--	ND(5)	--	--	ND(5)	--	ND(10)	--	ND(20)	0.76	0.42	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	--	--	ND(11)	--	--	--	--	--	--	--	--	ND(22)	--	--	--
Western Boundary Wells	BW-2A	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	--	--	ND(11)	--	--	--	--	--	--	--	--	ND(22)	--	--	--
Western Boundary Wells	BW-2B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	ND(20)	--	--	--
Western Boundary Wells	BW-2C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	--	--	ND(100)	--	--	--	--	--	--	--	--	ND(200)	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	--	--	ND(10)	--	--	--	--	--	--	--	--	ND(20)	--	--	--
Western Boundary Wells	BW-3C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	--	--	ND(100)	--	--	--	--	--	--	--	--	ND(200)	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	09/23/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Western Boundary Wells	BW-4B	03/10/20	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.025) UJ	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	--	--	ND(10)	--	--	--	--	--	--	--	--	ND(20)	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	4.8 J	--	--	--	--	--	--	--	--	ND(20)	--	--	--
Western Boundary Wells	BW-5C	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	--	--	ND(13)	--	--	--	--	--	--	--	--	ND(25)	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	ND(10)	--	--	--	--	--	--	--	--	ND(20)	--	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Hexachlorobutadiene (µg/L)	Hexachlorocyclopentadiene (µg/L)	Hexachloroethane (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Isophorone (µg/L)	Naphthalene (µg/L)	Nitrobenzene (µg/L)	N-Nitrosodimethylamine (µg/L)	N-Nitrosodi- n-propylamine (µg/L)	N-Nitrosodiphenylamine (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Phenol (µg/L)	Pyrene (µg/L)	Pyridine (µg/L)
	Cleanup Levels		0.14	0.41	3.28	0.343	781	30	1.4	0.0049	0.011	122	1	170	5,761	117	20
Tank Farm Wells	OW-64	12/11/20	--	ND(18.8) R	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)	ND(18.8)	ND(9.41)	ND(9.41)	ND(9.41)	ND(9.41)
Tank Farm Wells	OW-64	03/03/21	ND(5)	ND(5)	ND(5)	ND(3)	ND(5)	1.8JD/ND(3)U*	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	0.8 J	ND(5)	ND(2)	ND(5)
Tank Farm Wells	OW-64	06/29/21	ND(5)	ND(5)	ND(5)	ND(0.3)	ND(5)	--	ND(5)	ND(5)	ND(5)	ND(5)	ND(20)	0.74	ND(5)	0.34	ND(5)
Tank Farm Wells	OW-64	09/23/21	--	--	--	--	--	2.4	--	--	--	--	--	0.46 J	2.4 J	0.31	--
Tank Farm Wells	OW-64	12/29/21	--	--	--	--	--	2.7	--	--	--	--	--	1.2	ND(5)	0.62	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(20)	ND(10)	ND(10)	ND(10)	ND(10)
Western Boundary Wells	BW-4B	03/10/20	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	--	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5-2a. SEMI-VOLATILE ORGANIC COMPOUNDS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, DB/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Benzidine (µg/L)	2,3,4,6-Tetrachlorophenol (µg/L)	2,3,5,6-Tetrachlorophenol (µg/L)	Dibenz(a,h)acridine (µg/L)	7,12-Dimethylbenz(a)anthracene (µg/L)	1,2-Diphenylhydrazine (µg/L)	Quinoline (µg/L)	Thiophenol (Benzene thiol) (µg/L)
	Cleanup Levels		0.0011	240	NA	NA	0.0001	0.780	0.024	NA
Tank Farm Wells	OW-64	12/11/20	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	03/03/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	06/29/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	09/23/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	12/29/21	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1C	09/13/17	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/12/18	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	03/10/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	--	--	--	--	--	--	--	--

Notes:
-- = Not Measured
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
µg/L = micrograms per liter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.
J = Estimated concentration
J- = Estimated concentration, possibly biased low
JB = Estimated concentration due to blank contamination
R = Rejected, Data not usable
UJ = Estimated reporting limit
U = Evaluated to be undetected at the reported concentration
* = The first result represents the laboratory reported concentration. The second result was evaluated to be undetected at the reported concentration by the data validator. The result was determined to be a false positive.

TABLE 5-2b. PESTICIDES ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aldrin (µg/L)	alpha-BHC (µg/L)	beta-BHC (µg/L)	delta-BHC (µg/L)	Lindane (µg/L)	Chlordane (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	2,4-DDE (µg/L)	4,4'-DDT (µg/L)
	Cleanup Levels		0.002	0.069	0.243	NA	0.415	0.448	0.317	0.462	0.462	2.29
Evaporation Ponds	EP-2	11/21/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	09/16/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	06/21/21	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(6.7)	ND(0.67)	ND(0.67)	--	ND(0.67)
Evaporation Ponds	EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	11/20/19	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(4)	ND(0.4)	ND(0.4)	--	ND(0.5)
Evaporation Ponds	EP-3	09/16/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	04/29/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	04/29/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	11/20/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	12/22/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	11/20/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	09/07/18	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	04/29/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	12/22/20	--	--	--	--	--	--	--	--	--	--

TABLE 5-2b. PESTICIDES ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dieldrin (µg/L)	Endosulfan I (µg/L)	Endosulfan II (µg/L)	Endosulfan Sulfate (µg/L)	Endrin (µg/L)	Endrin Aldehyde (µg/L)	Heptachlor (µg/L)	Heptachlor Epoxide (µg/L)	Methoxychlor (µg/L)	Toxaphene (µg/L)
	Cleanup Levels		0.018	98.7	98.7	110	2.23	NA	0.0221	0.0014	37	0.158
Evaporation Ponds	EP-2	11/21/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	09/16/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	06/21/21	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(0.67)	ND(6.7)
Evaporation Ponds	EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	11/20/19	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.5)	ND(4)
Evaporation Ponds	EP-3	09/16/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	04/29/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	04/29/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	11/20/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	12/22/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	11/20/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	09/17/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/15/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	09/07/18	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	04/29/19	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	12/22/20	--	--	--	--	--	--	--	--	--	--

TABLE 5-2b. PESTICIDES ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aldrin (µg/L)	alpha-BHC (µg/L)	beta-BHC (µg/L)	delta-BHC (µg/L)	Lindane (µg/L)	Chlordane (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	2,4-DDE (µg/L)	4,4'-DDT (µg/L)
	Cleanup Levels		0.002	0.069	0.243	NA	0.415	0.448	0.317	0.462	0.462	2.29
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(0.75)	ND(0.75)	ND(0.5)	ND(0.75)	ND(0.75)	ND(10)	ND(0.5)	--	ND(0.5)	ND(0.5)
Evaporation Ponds	EP-12A	11/21/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(1)	ND(1)	--	ND(1.25)
Evaporation Ponds	EP-12A	12/22/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(0.45455)	ND(0.45455)	ND(0.45455)	ND(0.45455)	ND(0.45455)	ND(4.54545)	ND(0.45455)	ND(0.45455)	--	ND(0.56818)
Evaporation Ponds	EP-12B	09/18/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	12/22/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--

Notes:
-- = Not Measured
BHC = benzene hexachloride
DDD = dichlorodiphenyldichloroethane
DDE = dichlorodiphenyldichloroethylene
DDT = dichlorodiphenyltrichloroethane
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
µg/L = micrograms per liter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.

TABLE 5-2b. PESTICIDES ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Dieldrin (µg/L)	Endosulfan I (µg/L)	Endosulfan II (µg/L)	Endosulfan Sulfate (µg/L)	Endrin (µg/L)	Endrin Aldehyde (µg/L)	Heptachlor (µg/L)	Heptachlor Epoxide (µg/L)	Methoxychlor (µg/L)	Toxaphene (µg/L)
	Cleanup Levels		0.018	98.7	98.7	110	2.23	NA	0.0221	0.0014	37	0.158
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.75)	ND(0.5)	ND(0.75)	ND(0.75)	ND(0.5)	ND(0.8)	ND(10)
Evaporation Ponds	EP-12A	11/21/19	ND(1)	ND(1)	ND(1)	ND(1)	ND(1.25)	ND(1)	ND(1)	ND(1)	ND(1.25)	ND(10)
Evaporation Ponds	EP-12A	12/22/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	ND(0.45455)	ND(0.45455)	ND(0.45455)	ND(0.45455)	ND(0.56818)	ND(0.45455)	ND(0.45455)	ND(0.45455)	ND(0.56818)	ND(4.54545)
Evaporation Ponds	EP-12B	09/18/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	12/22/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	06/21/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--

Notes:
-- = Not Measured
BHC = benzene hexachloride
DDD = dichlorodiphenyldichloroethane
DDE = dichlorodiphenyldichloroethylene
DDT = dichlorodiphenyltrichloroethane
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
µg/L = micrograms per liter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Deep Monitoring Wells	OW-01	12/11/20	290	ND(2)	ND(1)	42.9	ND(3)	349	ND(5)	2560/ND(2560)U*	ND(10)	ND(10)	ND(20)	423	ND(1)
Deep Monitoring Wells	OW-01	03/03/21	760	ND(1)	0.8 J	45	ND(2)	360	ND(2)	--	7.2	ND(6)	ND(6)	440 J+	0.49 J
Deep Monitoring Wells	OW-01	06/10/21	830 J+	ND(1)	0.71 J	45 J-	ND(2)	370	ND(2)	2900	4.7 J	ND(6)	ND(6)	420	0.45 J
Deep Monitoring Wells	OW-01	09/29/21	--	--	0.67 J	47	--	--	ND(2)	--	ND(6)	--	--	330	0.3 J
Deep Monitoring Wells	OW-01	12/08/21	--	--	0.76 J	48	--	--	ND(2)	--	6.6	--	--	360	0.45 J
Deep Monitoring Wells	OW-10	12/11/20	ND(200)	ND(2)	ND(1)	53.5	ND(3)	527	ND(5)	59500	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Deep Monitoring Wells	OW-10	03/12/21	ND(20)	ND(5)	ND(5)	55	ND(2)	620	ND(2)	--	ND(6)	ND(6)	ND(6)	20 J	ND(2.5)
Deep Monitoring Wells	OW-10	03/12/21	ND(20)	ND(5)	ND(5)	54	ND(2)	610	ND(2)	--	ND(6)	ND(6)	ND(6)	18 J	ND(2.5)
Deep Monitoring Wells	OW-10	06/10/21	82 J+	ND(1)	0.64 J	54 J-	ND(2)	590	ND(2)	61000	ND(6)	ND(6)	ND(6)	62	0.15 J
Deep Monitoring Wells	OW-10	09/23/21	--	--	2	110	--	--	ND(2)	--	4.2 J	--	--	1800	3 JB
Deep Monitoring Wells	OW-10	12/08/21	--	--	1.3 J	88	--	--	ND(2)	--	4.3 J	--	--	1500	1.9 J
Deep Monitoring Wells	OW-11	09/18/17	--	--	2.9	7.7	--	--	ND(2)	--	ND(6)	--	ND(6)	11	ND(0.5)
Deep Monitoring Wells	OW-11	09/18/18	--	--	2	8	--	--	ND(2)	--	ND(6)	--	ND(6)	12	ND(0.5)
Deep Monitoring Wells	OW-11	08/20/19	4.5	ND(1)	2	7.3	ND(2)	1300	ND(2)	--	ND(6)	ND(6)	ND(20)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-11	09/20/20	13 J	ND(1)	1.7	7.8	ND(2)	1500	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(50)	ND(0.5)
Deep Monitoring Wells	OW-11	09/30/21	--	--	2	6.4	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(50)	ND(0.5)
Deep Monitoring Wells	OW-12	09/19/17	--	--	1.9	23	--	--	ND(2)	--	4.1	--	1.9	110	0.32
Deep Monitoring Wells	OW-12	09/19/18	--	--	2	38	--	--	ND(2)	--	4.6	--	ND(6)	430	1
Deep Monitoring Wells	OW-12	09/17/20	230	ND(1)	1.7	26	ND(10)	400	ND(10)	--	ND(30)	ND(30)	ND(30)	180 J	0.51
Deep Monitoring Wells	OW-12	09/30/21	--	--	1.5	19	--	--	ND(2)	--	ND(6)	--	ND(1)	48	0.093
Deep Monitoring Wells	OW-13	12/09/20	ND(200)	ND(2)	ND(1)	19.6	ND(3)	326	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Deep Monitoring Wells	OW-13	03/02/21	ND(20)	ND(1)	0.89 J	21	ND(2)	370	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(50)	ND(0.5)
Deep Monitoring Wells	OW-13	06/09/21	27 J+	ND(1)	0.75 J	20	ND(2)	320	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(50)	0.069 J
Deep Monitoring Wells	OW-13	09/24/21	--	--	0.72 J	19	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(50)	ND(0.5)
Deep Monitoring Wells	OW-13	12/07/21	--	--	0.73 J	22	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(50)	ND(0.5)
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	2.8	150	--	--	ND(2)	--	ND(6)	--	4.8 J	590	0.52
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	4.3	2000	--	--	ND(2)	--	ND(6)	--	ND(1)	4000	0.29 J
Eastern Boundary Wells	OW-14	12/30/21	--	--	4.2	2200 J+	--	--	ND(2)	--	ND(6)	--	ND(1)	4700	0.14 J
Eastern Boundary Wells	OW-29	12/09/20	ND(200)	ND(2)	ND(1)	79.2	ND(3)	528	ND(5)	--	ND(10)	ND(10)	ND(20)	338	ND(1)
Eastern Boundary Wells	OW-29	03/02/21	190	ND(1)	0.7 J	80	ND(2)	590	ND(2)	--	ND(6)	ND(6)	ND(6)	390	0.057J/ND(0.5)U*
Eastern Boundary Wells	OW-29	06/09/21	380 J+	ND(1) UJ	0.64 J	77	ND(2)	570	ND(2)	--	2.9 J	ND(6)	ND(6)	340	0.093 J
Eastern Boundary Wells	OW-29	09/24/21	--	--	0.75 J	120	--	--	ND(2)	--	ND(6)	--	0.88J/ND(1)U*	800	0.58
Eastern Boundary Wells	OW-29	12/07/21	--	--	ND(5)	88	--	--	ND(2)	--	ND(6)	--	ND(5)	600 J+	0.11 J
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	0.81 J	160	--	--	ND(2)	--	6 J	--	4.7 JB	790	1.3
Eastern Boundary Wells	OW-30	12/30/21	--	--	0.93 J	150 J+	--	--	ND(2)	--	ND(6)	--	4.1	310 J	0.9
Eastern Boundary Wells	OW-50	12/09/20	1250	ND(2)	1.78	91.4	ND(3)	353	ND(5)	--	ND(10)	ND(10)	ND(20)	502	ND(1)
Eastern Boundary Wells	OW-50	03/02/21	7.8J/ND(20)U*	ND(1)	2	56	ND(2)	390	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(50)	ND(0.5)
Eastern Boundary Wells	OW-50	06/09/21	8300 J+	ND(1) UJ	2.4	230	ND(2)	390	ND(2)	35000	7.6	2.5 J	ND(6)	3000	2.9
Eastern Boundary Wells	OW-50	09/24/21	--	--	2.1	91	--	--	ND(2)	--	6.5	--	0.97J/ND(1)U*	730	0.75
Eastern Boundary Wells	OW-50	12/07/21	--	--	2	57	--	--	ND(2)	--	ND(6)	--	ND(1)	17 J	ND(0.5)
Eastern Boundary Wells	OW-52	12/09/20	ND(200)	ND(2)	ND(1)	29.3	ND(3)	322	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Eastern Boundary Wells	OW-52	03/02/21	310	ND(1)	0.67 J	30	ND(2)	360	ND(2)	--	ND(6)	ND(6)	ND(6)	170	0.048J/ND(0.5)U*
Eastern Boundary Wells	OW-52	06/09/21	12000 J+	ND(1) UJ	2	150	ND(2)	760	ND(2)	19000	16	2.8 J	6 J	3500	3.2
Eastern Boundary Wells	OW-52	09/24/21	--	--	0.76 J	49	--	--	ND(2)	--	4.9 J	--	1.8 JB	1200	0.87
Eastern Boundary Wells	OW-52	12/07/21	--	--	0.64 J	44	--	--	ND(2)	--	6.9	--	0.88 J	1200	0.67
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	7.1	180	--	--	ND(2)	--	ND(6)	--	4.7 JB	790	11
Eastern Boundary Wells	OW-54	12/29/21	--	--	6.5	200 J+	--	--	ND(2)	--	ND(6)	--	4.7	1100	9
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	5.5 J	560	--	--	ND(2)	--	ND(6)	--	0.48J/ND(1)U*	3800	0.49 J
Eastern Boundary Wells	OW-55	12/29/21	--	--	5.2	610 J+	--	--	ND(2)	--	ND(6)	--	0.66 J	4000	0.57
Eastern Boundary Wells	OW-56	12/23/20	4570 J	ND(2)	2.54	572	ND(3)	553	ND(5)	66800	ND(10)	ND(10)	29.8	4440 J	1.19
Eastern Boundary Wells	OW-56	03/10/21	630	ND(1)	7.4	580	ND(2)	610	ND(2)	--	ND(6)	--	8.4	1300	0.87
Eastern Boundary Wells	OW-56	06/22/21	2000 J	ND(1)	6.4	550	ND(2)	570	ND(2)	--	ND(6) UJ	7.6	5.4 J	2100	1.1
Eastern Boundary Wells	OW-56	09/24/21	--	--	4.4	460	--	--	ND(2)	--	ND(6)	--	6.7	1100	0.94
Eastern Boundary Wells	OW-56	12/23/21	--	--	3.4 J	420	--	--	ND(2)	--	ND(6)	--	5.8	770	1
Eastern Boundary Wells	OW-66	09/17/21	--	ND(5)	4.8 J	1400	ND(2)	--	ND(2)	87000	2.7 J	10	--	6900 J	9 J
Eastern Boundary Wells	OW-66	12/07/21	--	--	7.7	1400	--	--	ND(2)	--	4 J	--	13	7000 J+	26
Eastern Boundary Wells	OW-70	09/17/21	--	ND(1)	3	560	ND(2)	--	ND(2)	24000	ND(6)	8.4	--	780	0.57
Eastern Boundary Wells	OW-70	12/22/21	--	--	3.2	610	--	--	ND(2)	--	ND(6)	--	7.9	370	0.31 J
Evaporation Ponds	EP-2	11/21/19	180	ND(5)	9.4	140	ND(2)	330	ND(2)	--	8.3	ND(6)	10	2900	ND(2.5)
Evaporation Ponds	EP-2	09/16/20	360	0.75 J	6.4	220	ND(2)	450	ND(2)	--	3.4 J	ND(6)	ND(6)	2300 J+	0.29 J
Evaporation Ponds	EP-2	09/17/20	ND(20)	ND(1)	ND(1)	ND(3)	ND(2)	ND(40)	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(50)	0.043 J
Evaporation Ponds	EP-2	12/21/20	ND(200)	ND(2)	5.37	33.3 J	ND(3)	ND(100) UJ	ND(5)	--	ND(10)	ND(10)	ND(20)	366 J	ND(1)
Evaporation Ponds	EP-2	06/21/21	230	ND(5)	9.5 J	240	ND(2)	620	ND(2)	3300000	3.1 J	6.2	5 J	850	ND(5)
Evaporation Ponds	EP-2	12/15/21	--	--	8.3 J	210	--	--	ND(2)	--	ND(6)	--	4.6 J+	700	ND(5)
Evaporation Ponds	EP-3	11/20/19	250	ND(5)	9.2	150	ND(2)	470	ND(2)	--	14	ND(6)	7.5	9600	ND(2.5)
Evaporation Ponds	EP-3	09/16/20	5700 J+	0.87 J	9.6	320	ND(2)	480	ND(2)	--	7.4	ND(6)	8.8 J+	14000 J+	2.7

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
	Cleanup Levels		NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Deep Monitoring Wells	OW-01	12/11/20	ND(500)	13.4	ND(0.2)	ND(100)	ND(6)	ND(1000)	ND(5)	ND(5)	317000	ND(1)	33.9	--	ND(20)
Deep Monitoring Wells	OW-01	03/03/21	--	26	ND(0.2)	ND(8)	5.9 J	--	2.4	ND(5)	--	ND(0.25)	--	--	ND(10)
Deep Monitoring Wells	OW-01	06/10/21	440 J	26	ND(0.2)	ND(8)	ND(10)	870 J	2.3	ND(5)	360000	ND(0.25)	--	--	ND(10)
Deep Monitoring Wells	OW-01	09/29/21	--	16	ND(0.2)	--	--	--	2.5	ND(5)	--	--	--	--	ND(10)
Deep Monitoring Wells	OW-01	12/08/21	--	16	ND(0.2)	--	--	--	2.1	ND(5)	--	--	34	--	6.5 J
Deep Monitoring Wells	OW-10	12/11/20	7670	21.3	ND(0.2)	ND(100)	ND(6)	1040	9.91	ND(5)	406000	ND(1)	45.1	--	ND(20)
Deep Monitoring Wells	OW-10	03/12/21	--	75	ND(0.2)	ND(8)	ND(10)	--	9.2	1.8 J	--	ND(1.2)	--	--	ND(10)
Deep Monitoring Wells	OW-10	03/12/21	--	73	ND(0.2)	ND(8)	ND(10)	--	9.4	1.3 J	--	ND(1.2)	--	--	ND(10)
Deep Monitoring Wells	OW-10	06/10/21	8000	24	ND(0.2)	ND(8)	ND(10)	850 J	9.8	ND(5)	440000	ND(0.25)	--	--	ND(10)
Deep Monitoring Wells	OW-10	09/23/21	--	56	ND(0.2)	--	--	--	7.8	ND(5)	--	--	--	--	22 J
Deep Monitoring Wells	OW-10	12/08/21	--	160	ND(0.2)	--	--	--	9.2	ND(5)	--	--	44	--	35
Deep Monitoring Wells	OW-11	09/18/17	--	19	ND(0.2)	--	--	--	5	ND(5)	--	--	210	--	ND(10)
Deep Monitoring Wells	OW-11	09/18/18	--	18	0.047	--	--	--	2.4	ND(5)	--	--	180	--	ND(10)
Deep Monitoring Wells	OW-11	08/20/19	--	18	ND(0.2)	180	ND(10)	--	4.4	ND(5)	--	ND(0.5)	190	--	ND(10)
Deep Monitoring Wells	OW-11	09/20/20	--	17	ND(0.2)	210	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	200	--	ND(10) UJ
Deep Monitoring Wells	OW-11	09/30/21	--	23	ND(0.2)	--	--	--	ND(1)	--	--	--	--	--	ND(10)
Deep Monitoring Wells	OW-12	09/19/17	--	5.8	ND(0.2)	--	--	--	0.89	ND(5)	--	--	--	--	17
Deep Monitoring Wells	OW-12	09/19/18	--	18	0.054	--	--	--	ND(1)	ND(5)	--	--	11	--	6.4
Deep Monitoring Wells	OW-12	09/17/20	--	9.5 J	0.15 J+	ND(40)	ND(50)	--	ND(1)	ND(25)	--	ND(0.25)	14	--	ND(50)
Deep Monitoring Wells	OW-12	09/30/21	--	3.9	ND(0.2)	--	--	--	ND(1)	--	--	--	--	--	ND(10)
Deep Monitoring Wells	OW-13	12/09/20	--	26.9	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	16	--	ND(20)
Deep Monitoring Wells	OW-13	03/02/21	--	27	ND(0.2)	9.8	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Deep Monitoring Wells	OW-13	06/09/21	--	16	ND(0.2)	ND(8)	ND(10) UJ	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Deep Monitoring Wells	OW-13	09/24/21	--	28	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	--	--	ND(10)
Deep Monitoring Wells	OW-13	12/07/21	--	25	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	17	--	ND(10)
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	770	ND(0.2)	--	--	--	1.4	ND(5)	--	--	33	--	14 J
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	1800	ND(0.2)	--	--	--	0.59 J	ND(5)	--	--	--	--	ND(10) UJ
Eastern Boundary Wells	OW-14	12/30/21	--	1900	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	1.7	--	ND(10)
Eastern Boundary Wells	OW-29	12/09/20	--	349	ND(0.2)	ND(100)	26.2	--	ND(5)	ND(5)	--	ND(1)	51.1	--	ND(20) UJ
Eastern Boundary Wells	OW-29	03/02/21	--	350	ND(0.2)	ND(8)	24 J+	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Eastern Boundary Wells	OW-29	06/09/21	--	190	ND(0.2)	7.8 J-	25	--	ND(1)	2.4 J	--	ND(0.25)	--	--	ND(10)
Eastern Boundary Wells	OW-29	09/24/21	--	350	ND(0.2)	--	--	--	0.45 J	ND(5)	--	--	--	--	ND(10) UJ
Eastern Boundary Wells	OW-29	12/07/21	--	370	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	51	--	ND(10)
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	180	ND(0.2)	--	--	--	0.6 J	ND(5)	--	--	--	--	ND(10) UJ
Eastern Boundary Wells	OW-30	12/30/21	--	180	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	28	--	7.3 J
Eastern Boundary Wells	OW-50	12/09/20	--	134	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	13	--	ND(20)
Eastern Boundary Wells	OW-50	03/02/21	--	120	ND(0.2)	ND(8)	ND(10) UJ	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Eastern Boundary Wells	OW-50	06/09/21	8600	210	ND(0.2)	ND(8) UJ	5.1 J	1100	0.7 J	ND(5)	260000	ND(0.25)	--	--	12
Eastern Boundary Wells	OW-50	09/24/21	--	130	ND(0.2)	--	--	--	0.41 J	ND(5)	--	--	--	--	ND(10) UJ
Eastern Boundary Wells	OW-50	12/07/21	--	120	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	13	--	ND(10)
Eastern Boundary Wells	OW-52	12/09/20	--	34.1	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	10.6	--	ND(20)
Eastern Boundary Wells	OW-52	03/02/21	--	30	ND(0.2)	ND(8)	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Eastern Boundary Wells	OW-52	06/09/21	5800	210	ND(0.2)	11 J-	13	3600	0.99 J	ND(5)	490000	ND(0.25)	--	--	18
Eastern Boundary Wells	OW-52	09/24/21	--	75	ND(0.2)	--	--	--	0.56 J	ND(5)	--	--	--	--	7.1 J
Eastern Boundary Wells	OW-52	12/07/21	--	56	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	12	--	ND(10)
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	1500	ND(0.2)	--	--	--	0.41 J	ND(5)	--	--	--	--	8.5 J
Eastern Boundary Wells	OW-54	12/29/21	--	1400	ND(0.2)	--	--	--	0.59 J	ND(5)	--	--	54	--	12
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	3200	ND(0.2)	--	--	--	0.63 J	ND(5)	--	--	--	--	ND(10) UJ
Eastern Boundary Wells	OW-55	12/29/21	--	3300	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	5	--	ND(10)
Eastern Boundary Wells	OW-56	12/23/20	13500	846	ND(0.2)	ND(100)	79.1	2160	ND(5)	ND(5)	340000	ND(1)	14	--	ND(20)
Eastern Boundary Wells	OW-56	03/10/21	--	1700	ND(0.2)	ND(8)	78	--	ND(1)	1.9 J	--	ND(0.25)	--	--	ND(10)
Eastern Boundary Wells	OW-56	06/22/21	--	800	ND(0.2)	ND(8)	82	--	0.66 J	ND(5)	--	ND(0.25)	--	--	7.6 J
Eastern Boundary Wells	OW-56	09/24/21	--	280	ND(0.2)	--	--	--	1.1	ND(5)	--	--	--	--	ND(10)
Eastern Boundary Wells	OW-56	12/23/21	--	190	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	14	--	ND(10)
Eastern Boundary Wells	OW-66	09/17/21	22000	2600	ND(0.2)	--	380 J	970 J	ND(5)	ND(5)	470000	--	--	8.3 J	9.5 J
Eastern Boundary Wells	OW-66	12/07/21	--	2400	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	1.8 J	--	12
Eastern Boundary Wells	OW-70	09/17/21	4700	230	ND(0.2)	--	47	2700	0.53 J	ND(5)	300000	--	--	--	9.8 J
Eastern Boundary Wells	OW-70	12/22/21	--	310	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	8.2	--	ND(10) UJ
Evaporation Ponds	EP-2	11/21/19	--	150	ND(0.2)	71	16	--	3.2	2.6	--	ND(2.5)	1.6	--	37
Evaporation Ponds	EP-2	09/16/20	--	120	ND(0.2)	ND(8)	56	--	2.7	2.8 J	--	ND(0.25)	0.91	--	17
Evaporation Ponds	EP-2	09/17/20	--	ND(2)	ND(0.2)	ND(8)	ND(10) UJ	--	ND(1)	ND(5)	--	ND(0.25)	ND(0.5)	--	ND(10) UJ
Evaporation Ponds	EP-2	12/21/20	--	65.7 J	ND(0.2)	ND(100)	16.6	--	ND(5) UJ	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-2	06/21/21	130000	390	ND(0.2)	ND(8)	77	320000	3.4 J-	1.9 J	2600000	ND(2.5)	--	--	14
Evaporation Ponds	EP-2	12/15/21	--	330	ND(0.2)	--	--	--	ND(10)	ND(5)	--	--	1.3 J	--	11
Evaporation Ponds	EP-3	11/20/19	--	340	0.22	63	57	--	5.5	ND(5)	--	ND(2.5)	2.9	--	39
Evaporation Ponds	EP-3	09/16/20	--	250	ND(0.2)	ND(8)	61	--	5.3	2.9 J	--	ND(0.25)	1.8	--	53

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Evaporation Ponds	EP-3	12/21/20	1550	ND(2)	10.1	146	ND(3)	678	ND(5)	--	ND(10)	ND(10)	ND(20)	3050	ND(1)
Evaporation Ponds	EP-3	06/21/21	ND(200)	ND(100)	60 J	360	ND(20)	4400	ND(20)	1600000	ND(60)	39 J	ND(60)	5300	ND(50)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	160	ND(5)	8.4	240	0.51	450	ND(2)	--	1.9	ND(6)	5.6	530	ND(2.5)
Evaporation Ponds	EP-4	09/17/20	ND(100)	ND(10)	36	270	ND(10)	1200	ND(10)	--	ND(30)	ND(30)	ND(30)	120J/ND(250)U*	ND(5)
Evaporation Ponds	EP-4	12/21/20	ND(200)	ND(2)	21.8	196	ND(3)	1030	ND(5)	--	ND(10)	ND(10)	ND(20)	797	ND(1)
Evaporation Ponds	EP-4	06/21/21	760	ND(50)	83	300	ND(20)	3900	ND(20)	1600000	ND(60)	32 J	ND(60)	1400	ND(25)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	710	ND(5)	14	200	0.66	480	ND(2)	--	1.8	ND(6)	4.4	380	0.49
Evaporation Ponds	EP-5	09/17/20	140	ND(10)	24	240	ND(10)	970	ND(10)	--	ND(30)	ND(30)	ND(30)	270 JB	ND(5)
Evaporation Ponds	EP-5	12/21/20	386	ND(2)	23.7	178	ND(3)	975	ND(5)	--	ND(10)	ND(10)	ND(20)	370	1.14
Evaporation Ponds	EP-5	06/21/21	58 J	ND(50)	55	210	ND(10)	2500	ND(10)	1300000	ND(30)	24 J	ND(30)	460	ND(25)
Evaporation Ponds	EP-5	12/15/21	--	--	200	260	--	--	ND(40)	--	ND(120)	--	ND(100)	2800	ND(50)
Evaporation Ponds	EP-6	04/29/19	500	ND(5)	14	190	0.57	480	ND(2)	--	2.5	ND(6)	ND(6)	320	0.47
Evaporation Ponds	EP-6	09/17/20	ND(100)	ND(10)	24	240	ND(10)	900	ND(10)	--	ND(30)	ND(30)	ND(30)	86J/ND(250)U*	ND(5)
Evaporation Ponds	EP-6	12/21/20	367	2.31	30	246	ND(3)	970	ND(5)	--	ND(10)	ND(10)	ND(20)	262	ND(1)
Evaporation Ponds	EP-6	06/21/21	350	ND(50)	36 J	130	ND(10)	1500	ND(10)	740000	ND(30)	14 J	ND(30)	230 J	ND(25)
Evaporation Ponds	EP-6	12/15/21	--	--	53	200	--	--	ND(10)	--	ND(30)	--	ND(20)	1400	1.7 J
Evaporation Ponds	EP-7	11/20/19	360	ND(100)	310	170	ND(40)	11000	ND(40)	--	ND(120)	ND(120)	89	280	ND(50)
Evaporation Ponds	EP-7	09/17/20	3400	ND(50)	370	140	ND(10)	12000	ND(10)	--	16 J	ND(30)	ND(30)	1100	ND(25)
Evaporation Ponds	EP-7	12/21/20	ND(1000)	ND(20)	464	217	ND(15)	11100	ND(25)	--	55.8	ND(50)	ND(100)	ND(1000)	ND(10)
Evaporation Ponds	EP-7	06/21/21	ND(400)	ND(100)	840	ND(60)	ND(40)	26000	ND(40)	190000	ND(120)	ND(120)	ND(120)	ND(1000)	ND(50)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	220	ND(100)	260	210	ND(40)	8600	ND(40)	--	ND(120)	ND(120)	110	230	ND(50)
Evaporation Ponds	EP-8	09/17/20	490	ND(100)	320	240	ND(10)	9200	ND(10)	--	17 J	ND(30)	ND(30)	260 JB	ND(50)
Evaporation Ponds	EP-8	12/22/20	ND(1000) UJ	ND(20)	552	ND(50)	ND(15)	18100	ND(25)	--	75.8	ND(50)	ND(100)	ND(1000)	ND(10)
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	1700	ND(150)	--	--	ND(100)	--	ND(300)	--	ND(100)	780 J	6.7 J
Evaporation Ponds	EP-9	11/20/19	140	ND(100)	100	160	ND(20)	2900	ND(20)	--	ND(60)	ND(60)	73	170	ND(50)
Evaporation Ponds	EP-9	09/17/20	110	ND(50)	240	260	ND(10)	7100	ND(10)	--	ND(30)	ND(30)	ND(30)	120J/ND(250)U*	ND(25)
Evaporation Ponds	EP-9	12/21/20	ND(1000)	ND(20)	380	304	ND(15)	8680	ND(25)	--	50.6	ND(50)	ND(100)	ND(1000)	ND(10)
Evaporation Ponds	EP-9	06/21/21	ND(1000)	ND(100)	1000	ND(150)	ND(100)	29000	ND(100)	230000	ND(300)	ND(300)	ND(300)	ND(1000)	ND(50)
Evaporation Ponds	EP-9	12/15/21	--	--	1700	ND(150)	--	--	ND(100)	--	ND(300)	--	ND(100)	420 J	ND(50)
Evaporation Ponds	EP-11	09/07/18	--	--	960	27	--	--	ND(10)	--	64	--	ND(30)	260	ND(50)
Evaporation Ponds	EP-11	04/29/19	500	9	120	200	2.7	4000	ND(10)	--	ND(30)	ND(30)	20	190	1.1
Evaporation Ponds	EP-11	12/22/20	1170 J	ND(20)	423 J	ND(50)	ND(15)	18600	ND(25)	--	95.9	ND(50)	ND(100)	ND(1000)	ND(10)
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	--	52	190	--	--	ND(2)	--	18	--	12	12000	5.4
Evaporation Ponds	EP-12A	11/21/19	1200	ND(5)	13	130	ND(2)	710	ND(2)	--	11	ND(6)	ND(6)	6300	0.61
Evaporation Ponds	EP-12A	12/22/20	34700 J	ND(10)	22.4	347	ND(3)	1360	ND(5)	--	41	17.1	ND(20)	28800	17.3
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	370	ND(5)	9.8	140	ND(2)	540	ND(2)	--	13	ND(6)	4.8	8000	ND(2.5)
Evaporation Ponds	EP-12B	09/18/20	460	ND(10)	22	260	1.2 J	950	ND(2)	--	4.3 J	ND(6)	ND(6)	420	ND(5)
Evaporation Ponds	EP-12B	12/22/20	409 J	ND(10)	16	195	ND(3)	905	ND(5)	--	ND(10)	ND(10)	ND(20)	956	ND(5)
Evaporation Ponds	EP-12B	06/21/21	130	ND(50)	63	290	ND(10)	2900	ND(10)	1700000	ND(30)	27 J	ND(30)	1100	ND(25)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	901	ND(20)	ND(10)	87.6	ND(3)	238	ND(5)	--	ND(10)	ND(10)	36.3	1840	ND(10)
Evaporation Ponds	STP-1 to EP-2	03/10/21	840	1.1 JB	3.5	50	ND(2)	210	ND(5)	--	ND(6)	6.2	27	1700	0.21J/ND(0.5)U*
Evaporation Ponds	STP-1 to EP-2	06/29/21	250	ND(5) UJ	4.4 J	23	ND(2)	210	ND(2)	--	ND(6)	2.7 J	21	550	0.18 J
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	4.2	55	--	--	ND(10)	--	ND(30)	--	18	470	0.29
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	3.6 J	42	--	--	ND(2)	--	ND(6)	--	18 J+	690	ND(5)
Land Treatment Unit Wells	MW-1	09/13/18	--	ND(1)	1.3	13	ND(2)	--	ND(2)	--	1.8	--	ND(6)	160	1.3
Land Treatment Unit Wells	MW-1	12/06/18	--	ND(1)	1.1	ND(20)	ND(3)	--	ND(2)	--	ND(6)	ND(6)	--	--	ND(1)
Land Treatment Unit Wells	MW-1	08/12/19	260	ND(1)	1.3	14	ND(2)	700	ND(2)	--	1.7	ND(6)	ND(6)	120	0.37
Land Treatment Unit Wells	MW-1	09/22/20	81 J+	ND(1)	1.4	13	ND(2)	760	ND(2)	--	ND(6)	ND(6)	ND(6)	37 J+	0.42J/ND(0.5)U*
Land Treatment Unit Wells	MW-1	09/29/21	--	--	2.1	13	--	--	--	--	ND(6)	--	--	120	0.52
Land Treatment Unit Wells	MW-2	09/13/18	--	ND(1)	0.99	17	ND(2)	--	ND(2)	--	ND(6)	--	ND(6)	10	ND(0.5)
Land Treatment Unit Wells	MW-2	12/06/18	--	ND(1)	1.1	ND(20)	ND(3)	--	ND(2)	--	ND(6)	ND(6)	--	--	ND(1)
Land Treatment Unit Wells	MW-2	08/13/19	15	ND(1)	1.2	18	ND(2)	750	ND(2)	--	ND(6)	ND(6)	ND(6)	69	ND(0.5)
Land Treatment Unit Wells	MW-2	09/18/20	69 JB	ND(1)	1	21	ND(2)	770	ND(2)	--	ND(6) UJ	ND(6)	ND(6)	36 J	0.39J/ND(0.5)U*
Land Treatment Unit Wells	MW-2	09/17/21	--	--	1.3 J	21	--	--	--	--	ND(6)	--	--	16 J	ND(2.5)
Land Treatment Unit Wells	MW-4	09/13/18	--	ND(1)	0.76	20	ND(2)	--	ND(2)	--	ND(6)	--	ND(6)	ND(0.5)	ND(0.5)
Land Treatment Unit Wells	MW-4	12/06/18	--	ND(1)	ND(1)	21	ND(3)	--	ND(2)	--	ND(6)	ND(6)	--	--	ND(1)
Land Treatment Unit Wells	MW-4	08/13/19	11	ND(1)	0.71	21	ND(2)	380	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-4	09/18/20	300	ND(1)	0.78 J	29	ND(2)	380	ND(2)	--	3.7 J	ND(6)	ND(6)	130	2.7
Land Treatment Unit Wells	MW-4	09/17/21	--	--	0.91 J	27	--	--	--	--	3.1 J	--	--	250	14
Land Treatment Unit Wells	MW-5	09/17/18	--	ND(1)	1.1	21	ND(2)	--	ND(2)	--	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-5	12/06/18	--	ND(1)	1	ND(20)	ND(3)	--	ND(2)	--	ND(6)	ND(6)	--	--	ND(1)
Land Treatment Unit Wells	MW-5	08/14/19	9.8	ND(1)	0.99	30	ND(2)	760	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-5	09/21/20	140	ND(1)	0.93 J	49	ND(2)	760	ND(2)	--	ND(6)	ND(6)	ND(6)	53 J+	0.11 J
Land Treatment Unit Wells	MW-5	09/29/21	--	--	1.1	18	--	--	--	--	ND(6)	--	--	ND(50)	ND(0.5)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
	Cleanup Levels		NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Evaporation Ponds	EP-3	12/21/20	--	281	ND(0.2)	ND(100)	124	--	ND(5) UJ	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-3	06/21/21	1400000	1100	ND(0.2)	ND(80)	460	2300000	ND(100) UJ	ND(50)	28000000	ND(25)	--	--	ND(100)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	--	360	0.098	ND(8)	11	--	6.8	5.6	--	ND(2.5)	2.1	--	8.2
Evaporation Ponds	EP-4	09/17/20	--	1300	ND(0.2)	ND(40)	50	--	ND(10)	ND(25)	--	ND(2.5)	1.7 J	--	ND(50)
Evaporation Ponds	EP-4	12/21/20	--	739	ND(0.2)	ND(100)	91.5	--	ND(5) UJ	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-4	06/21/21	950000	1700	ND(0.2)	ND(80)	240	2000000	ND(50) UJ	ND(50)	20000000	ND(12)	--	--	ND(100)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	--	480	0.068	ND(8)	14	--	5.3	6.9	--	ND(2.5)	2.3	--	ND(10)
Evaporation Ponds	EP-5	09/17/20	--	940	ND(0.2)	ND(40)	51	--	ND(10)	ND(25)	--	ND(2.5)	2.4 J	--	ND(50)
Evaporation Ponds	EP-5	12/21/20	--	959	ND(0.2)	ND(100)	60.5	--	ND(5) UJ	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-5	06/21/21	580000	2100	ND(0.2)	ND(40)	89	1400000	ND(50) UJ	ND(25)	13000000	ND(12)	--	--	ND(50)
Evaporation Ponds	EP-5	12/15/21	--	10000	ND(0.2)	--	--	--	ND(100)	ND(100)	--	--	ND(50)	--	ND(200)
Evaporation Ponds	EP-6	04/29/19	--	470	0.064	ND(8)	13	--	4	7.1	--	ND(2.5)	2.3	--	ND(10)
Evaporation Ponds	EP-6	09/17/20	--	770	ND(0.2)	ND(40)	61	--	ND(10)	ND(25)	--	ND(2.5)	2.8 J	--	ND(50)
Evaporation Ponds	EP-6	12/21/20	--	975	ND(0.2)	ND(100)	52.4	--	ND(5) UJ	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-6	06/21/21	360000	1300	ND(0.2)	ND(40)	38 J	850000	ND(50) UJ	ND(25)	7400000	ND(12)	--	--	ND(50)
Evaporation Ponds	EP-6	12/15/21	--	2500	ND(0.2)	--	--	--	ND(10)	ND(25)	--	--	ND(10)	--	ND(50)
Evaporation Ponds	EP-7	11/20/19	--	1900	ND(0.2)	ND(160)	350	--	ND(500)	ND(100)	--	ND(50)	ND(50)	--	ND(200)
Evaporation Ponds	EP-7	09/17/20	--	4300	ND(0.2)	ND(40)	340	--	ND(50)	ND(10)	--	ND(12)	9.6 J	--	ND(50)
Evaporation Ponds	EP-7	12/21/20	--	3520	ND(0.2)	ND(500)	414	--	ND(50) UJ	ND(25)	--	ND(10)	ND(50)	--	ND(100)
Evaporation Ponds	EP-7	06/21/21	9100000	7100	ND(0.2)	140 J	620	12000000	42 J-	ND(100)	90000000	ND(25)	--	--	ND(200)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	--	5100	ND(0.2)	ND(160)	230	--	ND(500)	39	--	ND(50)	ND(50)	--	ND(200)
Evaporation Ponds	EP-8	09/17/20	--	3700	ND(0.2)	ND(40)	260	--	ND(50)	9.9 J	--	ND(25)	9 J	--	ND(50)
Evaporation Ponds	EP-8	12/22/20	--	5240	ND(0.2)	ND(500)	633	--	ND(50)	ND(25)	--	ND(10)	ND(50)	--	ND(100)
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	15000	ND(0.2)	--	--	--	76 J	ND(250)	--	--	33 J	--	ND(500)
Evaporation Ponds	EP-9	11/20/19	--	1900	ND(0.2)	ND(80)	280	--	ND(200)	31	--	ND(50)	ND(50)	--	91
Evaporation Ponds	EP-9	09/17/20	--	3900	ND(0.2)	ND(40)	130	--	ND(50)	19 J	--	ND(12)	7.8 J	--	ND(50)
Evaporation Ponds	EP-9	12/21/20	--	4510	ND(0.2)	ND(500)	236	--	60 J-	ND(25)	--	ND(10)	ND(50)	--	ND(100)
Evaporation Ponds	EP-9	06/21/21	13000000	9500	ND(0.2)	350 J	490 J	14000000	ND(100) UJ	ND(250)	82000000	ND(25)	--	--	ND(500)
Evaporation Ponds	EP-9	12/15/21	--	16000	ND(1) UJ	--	--	--	ND(100)	ND(250)	--	--	25 J	--	ND(500)
Evaporation Ponds	EP-11	09/07/18	--	9000	ND(0.2)	--	--	--	ND(100)	10	--	--	13	--	ND(50)
Evaporation Ponds	EP-11	04/29/19	--	630	ND(0.2)	ND(40)	130	--	17	19	--	ND(10)	4.5	--	ND(50)
Evaporation Ponds	EP-11	12/22/20	--	9550	ND(0.2)	ND(500)	674	--	ND(500)	ND(25)	--	ND(10)	ND(50)	--	ND(100)
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	3100	ND(0.2)	--	--	--	22	16	--	--	17	--	21
Evaporation Ponds	EP-12A	11/21/19	--	570	ND(0.2)	33	87	--	ND(10)	2.2	--	ND(2.5)	1.9	--	22
Evaporation Ponds	EP-12A	12/22/20	--	5430	ND(0.2) UJ	ND(100)	219	--	ND(25)	ND(5)	--	ND(5)	ND(25)	--	77.8
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	--	400	ND(0.2)	50	64	--	ND(5)	3.7	--	ND(2.5)	2.5	--	32
Evaporation Ponds	EP-12B	09/18/20	--	1200	ND(0.2)	ND(8)	39 J-	--	ND(10)	16 J	--	ND(2.5)	1.8 J	--	ND(10)
Evaporation Ponds	EP-12B	12/22/20	--	1050	ND(0.2) UJ	ND(100)	126	--	ND(25)	ND(5)	--	ND(5)	ND(25)	--	ND(20)
Evaporation Ponds	EP-12B	06/21/21	780000	1200	ND(0.2)	ND(40)	300	1600000	ND(50) UJ	7.5 J	16000000	ND(12)	--	--	ND(50)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	283	ND(0.2)	ND(100)	8.81 J	--	ND(50) UJ	ND(5)	--	ND(10)	ND(50)	--	64.3
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	330	ND(0.2)	ND(8)	5.6 J	--	1.5	5.4	--	ND(0.25)	--	--	53
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	77	ND(0.4)	ND(8)	ND(10)	--	ND(5)	1.4 J	--	ND(0.25)	--	--	57 J+
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	160	ND(0.2)	--	--	--	1.3	--	--	--	--	--	68
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	150	0.15 J	--	--	--	ND(10)	--	--	--	1.1 J	--	87
Land Treatment Unit Wells	MW-1	09/13/18	--	10	0.17	--	--	--	ND(1)	ND(5)	--	--	9.4	2.3	ND(10)
Land Treatment Unit Wells	MW-1	12/06/18	--	--	ND(0.2)	--	ND(10)	--	ND(1)	ND(5)	--	--	--	ND(50)	ND(20)
Land Treatment Unit Wells	MW-1	08/12/19	--	4.6	0.054	9.5	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	10	--	ND(10)
Land Treatment Unit Wells	MW-1	09/22/20	--	4.7	ND(0.2) UJ	ND(8)	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	9.4	--	ND(10) UJ
Land Treatment Unit Wells	MW-1	09/29/21	--	4.9	ND(0.2)	--	--	--	ND(1)	--	--	--	--	--	ND(10)
Land Treatment Unit Wells	MW-2	09/13/18	--	2.6	0.14	--	--	--	ND(1)	ND(5)	--	--	8	ND(50)	ND(10)
Land Treatment Unit Wells	MW-2	12/06/18	--	--	ND(0.2)	--	ND(10)	--	ND(1)	ND(5)	--	--	--	ND(50)	ND(20)
Land Treatment Unit Wells	MW-2	08/13/19	--	2.7	0.046	8.5	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	8.6	--	7.5
Land Treatment Unit Wells	MW-2	09/18/20	--	21	ND(0.2) UJ	8.6	ND(10) UJ	--	ND(1)	ND(5)	--	ND(0.25) UJ	9.4	--	ND(10)
Land Treatment Unit Wells	MW-2	09/17/21	--	3.6	ND(0.2)	--	--	--	ND(5)	--	--	--	--	--	ND(10) UJ
Land Treatment Unit Wells	MW-4	09/13/18	--	5.9	0.11	--	--	--	ND(1)	ND(5)	--	--	14	0.91	ND(10)
Land Treatment Unit Wells	MW-4	12/06/18	--	--	ND(0.2)	--	ND(10)	--	ND(1)	ND(5)	--	--	--	ND(50)	ND(20)
Land Treatment Unit Wells	MW-4	08/13/19	--	5.6	ND(0.2)	8.1	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	13	--	ND(10)
Land Treatment Unit Wells	MW-4	09/18/20	--	120	ND(0.2)	ND(8)	ND(10) UJ	--	ND(1) UJ	ND(5)	--	ND(0.25)	16	--	ND(10)
Land Treatment Unit Wells	MW-4	09/17/21	--	30	ND(0.2)	--	--	--	ND(5)	--	--	--	--	--	ND(10)
Land Treatment Unit Wells	MW-5	09/17/18	--	4.5	0.096	--	--	--	ND(1)	ND(5)	--	--	8.2	ND(50)	ND(10)
Land Treatment Unit Wells	MW-5	12/06/18	--	--	ND(0.2)	--	ND(10)	--	ND(1)	ND(5)	--	--	--	ND(50)	ND(20)
Land Treatment Unit Wells	MW-5	08/14/19	--	5.9	ND(0.2)	8	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	9	--	ND(10)
Land Treatment Unit Wells	MW-5	09/21/20	--	13	ND(0.2)	ND(8)	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	9	--	ND(10) UJ
Land Treatment Unit Wells	MW-5	09/29/21	--	4.1	ND(0.2)	--	--	--	ND(1)	--	--	--	--	--	ND(10)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Land Treatment Unit Wells	OW-67	09/17/21	--	ND(5)	2.5 J	80	ND(10)	--	ND(10)	1000000	ND(30)	29 J	--	230 J	ND(2.5) UJ
Land Treatment Unit Wells	OW-67	12/23/21	--	--	3.1 J	93	--	--	ND(10)	--	ND(30)	19 J	ND(10)	1100	0.94 J
Land Treatment Unit Wells	OW-68	09/17/21	--	ND(5)	5.8	130	ND(10)	--	ND(10)	790000	ND(30)	100	--	2900 J	2J/ND(2.5)U*
Land Treatment Unit Wells	OW-68	12/23/21	--	--	18	88	--	--	ND(10)	--	ND(30)	86	5.2 J	6500	9.3
Land Treatment Unit Wells	SMW-2	09/11/17	--	--	9.2	82	--	--	ND(2)	--	390	--	4.2	4000	2.7
Land Treatment Unit Wells	SMW-2	09/18/18	--	--	5.6	30	--	--	ND(2)	--	26	--	ND(6)	760	ND(2.5)
Land Treatment Unit Wells	SMW-2	08/22/19	850	ND(5)	2.6	23	0.39	1300	ND(2)	--	47	ND(6)	ND(6)	520	0.59
Land Treatment Unit Wells	SMW-2	09/19/20	700	ND(5)	2.3 J	21	ND(2)	1300	ND(2)	--	20 J	ND(6)	ND(6)	390	0.27J/ND(2.5)U*
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	2.6	17	--	--	ND(2)	--	ND(6)	4.2	ND(5)	180	0.16
Land Treatment Unit Wells	SMW-4	09/12/18	--	ND(1)	3.1	27	ND(2)	--	ND(2)	--	17	--	ND(6)	710	0.88
Land Treatment Unit Wells	SMW-4	12/06/18	--	ND(1)	2.9	32	ND(3)	--	ND(2)	--	11	19	--	--	1
Land Treatment Unit Wells	SMW-4	08/13/19	900	ND(1)	3.4	23	ND(2)	1600	ND(2)	--	3.4	9.2	ND(6)	410	0.37
Land Treatment Unit Wells	SMW-4	09/20/20	3700	ND(1)	2.6	49	ND(2)	1700	ND(2)	--	15	8.7	ND(6)	1700 J+	1.9
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	3.2	27	--	--	ND(2)	--	6.7	6.3	0.5 J	680	0.6
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	--	ND(5)	7.6	5400	ND(2)	--	ND(2)	230000	ND(6)	12	--	5700 J	9.5 J
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	6.7	5700	--	--	ND(2)	--	ND(6)	--	0.8 J	9100	1 J
Marketing Tank Farm Wells	MKTF-02	12/18/20	200	ND(20)	ND(10)	788	ND(3)	881	ND(5)	631000	ND(10)	ND(10)	ND(20)	2560	ND(10)
Marketing Tank Farm Wells	MKTF-02	03/10/21	240	ND(5)	ND(5)	430	ND(2)	750	ND(2)	--	ND(6)	10	ND(6)	3100	0.5J/ND(2.5)U*
Marketing Tank Farm Wells	MKTF-02	06/17/21	400 J	ND(1)	1 J	390 J-	ND(2)	850	ND(2)	640000	ND(6)	8	ND(6)	2100	0.62 J
Marketing Tank Farm Wells	MKTF-02R	09/17/21	--	ND(5)	1 J	56	ND(2)	--	ND(2)	310000	ND(6)	5.3 J	--	47 J	ND(2.5) UJ
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	3 J	72	--	--	ND(2)	--	ND(6)	--	2.6 J+	710	0.51 J
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	--	ND(5)	5.2	1600	ND(2)	--	ND(2)	120000	8.2	9	--	9300 J	7.5 J
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	2.9	600	--	--	ND(2)	--	ND(6)	--	2.7	2200	1.7 J
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	3130	ND(2)	11.8	9400	ND(3)	445	ND(5)	277000	ND(10)	ND(10)	ND(20)	10700	1.01
Marketing Tank Farm Wells	MKTF-10	03/10/21	1000	ND(1)	8	9700	ND(2)	410	ND(2)	--	ND(6)	5.9 J	ND(6)	12000	0.65
Marketing Tank Farm Wells	MKTF-10	06/23/21	620 J+	ND(1)	11 J+	9800	ND(2)	510	ND(2)	310000	ND(6)	3.3 J	ND(6)	9500	0.31 J
Marketing Tank Farm Wells	MKTF-10	09/15/21	8500	--	10	9200	ND(2)	580	ND(2)	280000	ND(6)	3.4 J	4.3	12000	3.2
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	7.1	8900	--	--	ND(2)	--	ND(6)	--	3	11000	1.1
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	1300	ND(1)	16	3300	ND(2)	590	ND(2)	--	ND(6)	13	ND(6)	9800	0.85J/ND(2.5)U*
Marketing Tank Farm Wells	MKTF-11	06/17/21	230	ND(1)	12	4800 J-	ND(2)	580	ND(2)	260000	ND(6)	7.2	ND(6)	7100	0.43 J
Marketing Tank Farm Wells	MKTF-11	09/15/21	200	ND(1)	11	4900	ND(2)	670	ND(2)	250000	ND(6)	6.6	ND(1)	5300	0.19 J
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	--	14	4800	--	--	ND(2)	--	ND(6)	--	ND(5)	5500	0.47 J
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	2590 J	--	--	2720	ND(3)	407	ND(5)	--	ND(10)	ND(10)	ND(20)	10700 J	--
Marketing Tank Farm Wells	MKTF-16	12/28/20	2440	ND(2)	10.7	3290	ND(3)	439	ND(5)	--	ND(10)	ND(10)	ND(20)	12400	2.41
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	--	5.2	1100	--	--	ND(2)	--	5.3 J	--	17	6500	7.9
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	--	1.4	280	--	--	ND(2)	--	3.3 J	--	14	2000	2.7
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	--	ND(5)	5.5	320	ND(2)	--	ND(2)	110000	ND(6)	4.5 J	--	1400 J	0.39J/ND(2.5)U*
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	--	5.3	340	--	--	ND(2)	--	ND(6)	--	1.3	880	0.5 J
Marketing Tank Farm Wells	MKTF-18	12/16/20	2910	ND(2)	1.7	2250	ND(3)	381	ND(5)	102000	ND(10)	ND(10)	ND(20)	4010	1.01
Marketing Tank Farm Wells	MKTF-18	03/11/21	810 J+	ND(1) UJ	1.2	2300	ND(2)	400	ND(2)	--	ND(6)	ND(6)	ND(6)	2400	0.56
Marketing Tank Farm Wells	MKTF-18	06/23/21	1200 J+	ND(1)	1.8 J+	2600	ND(2)	400	ND(2)	110000	ND(6)	2.7 J	ND(6)	4600	0.7
Marketing Tank Farm Wells	MKTF-18R	09/17/21	--	ND(5)	7.5	1800	ND(2)	--	ND(2)	110000	ND(6) UJ	12	--	3300 J	1.9J/ND(2.5)U*
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	--	7.1	1500	--	--	ND(2)	--	ND(6)	--	1.1	2900	0.88
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	2900 J+	1.2 J-	57	670	ND(2)	ND(40)	ND(2)	160000	17	44	180	170000	8.3
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	12500	ND(2)	3.63	628	ND(3)	687	ND(5)	182000	ND(10)	10.5	ND(20)	7250	19.8

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
	Cleanup Levels		NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Land Treatment Unit Wells	OW-67	09/17/21	180000	8000	ND(0.2)	--	110 J	4600	2.8 J	ND(25)	2300000	--	--	ND(250)	ND(50)
Land Treatment Unit Wells	OW-67	12/23/21	--	9100	ND(0.2)	--	130	--	ND(10)	--	--	--	69	ND(250)	ND(50)
Land Treatment Unit Wells	OW-68	09/17/21	130000	11000	ND(0.2)	--	170 J	15000	7.6	ND(25)	2500000	--	--	ND(250)	ND(50)
Land Treatment Unit Wells	OW-68	12/23/21	--	6500	ND(0.2)	--	190	--	4.4 J	--	--	--	8.3	ND(250)	ND(50)
Land Treatment Unit Wells	SMW-2	09/11/17	--	490	ND(0.2)	--	--	--	24	ND(5)	--	--	120	--	8
Land Treatment Unit Wells	SMW-2	09/18/18	--	340	0.06	--	--	--	ND(5)	7.3	--	--	91	--	6.5
Land Treatment Unit Wells	SMW-2	08/22/19	--	370	0.094	ND(8)	47	--	ND(5)	5.1	--	ND(2.5)	92	--	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	--	340	ND(0.2) UJ	ND(8)	41 J	--	ND(5)	5.3	--	ND(1.2) UJ	85	--	ND(10)
Land Treatment Unit Wells	SMW-2	09/30/21	--	380	ND(0.2)	--	38	--	1.4	--	--	--	--	3.4	ND(10)
Land Treatment Unit Wells	SMW-4	09/12/18	--	22	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	30	49	5.8
Land Treatment Unit Wells	SMW-4	12/06/18	--	--	ND(0.2)	--	ND(10)	--	ND(1)	ND(5)	--	--	--	50	ND(20)
Land Treatment Unit Wells	SMW-4	08/13/19	--	8.6	0.054	10	4.1	--	ND(1)	ND(5)	--	ND(0.5)	30	--	5.8
Land Treatment Unit Wells	SMW-4	09/20/20	--	42	ND(0.2)	9.1	19 J+	--	ND(1)	ND(5)	--	ND(0.25)	24	--	8.8 J
Land Treatment Unit Wells	SMW-4	09/29/21	--	14	ND(0.2)	--	ND(10)	--	ND(1)	--	--	--	--	56	ND(10)
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	55000	3400	ND(0.2)	--	35 J	2900	ND(5)	ND(5)	720000	--	--	ND(50)	ND(10)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	3200	ND(0.2)	--	--	--	0.4 J	ND(5)	--	--	1.7 J	--	ND(10) UJ
Marketing Tank Farm Wells	MKTF-02	12/18/20	109000	6140	ND(0.2)	ND(100)	16.5	5680	ND(50)	ND(5)	1150000	ND(10)	ND(50)	--	ND(20)
Marketing Tank Farm Wells	MKTF-02	03/10/21	--	6700	ND(0.2)	ND(8)	13	--	ND(5)	15	--	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-02	06/17/21	110000	5600	ND(0.2)	ND(8)	21	4700	ND(5)	3 J	1400000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	48000	95	ND(0.2)	--	6.3 J	13000	ND(5)	1.4 J	1100000	--	--	ND(50)	19
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	230	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	87	--	8.8 J
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	31000	2700	ND(0.2)	--	16 J	3400	2.8 J	ND(5)	330000	--	--	16 J	16
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	2600	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	24	--	30 J
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	70000	5070	ND(0.2) UJ	ND(100)	16.4	ND(5)	ND(5)	321000	ND(1)	ND(5)	--	--	ND(20)
Marketing Tank Farm Wells	MKTF-10	03/10/21	--	5500	ND(0.2)	ND(8)	14	--	ND(1)	6.2	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-10	06/23/21	80000	5700	ND(0.2)	ND(8)	18	930 J	ND(1)	ND(5)	450000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-10	09/15/21	73000	5200	ND(0.2)	ND(8)	--	1900	1.5	ND(5)	440000	ND(0.25)	--	--	9.2 J
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	4900	ND(0.2)	--	--	--	0.45 J	ND(5)	--	--	0.43 J	--	7.1 J
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	--	6000	ND(0.2)	33	26	--	ND(1)	4.7 J	--	ND(1.2)	--	--	15
Marketing Tank Farm Wells	MKTF-11	06/17/21	74000	4800	ND(0.2)	17	29	1500 JB	ND(1)	ND(5)	940000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-11	09/15/21	--	4500	0.26	13	28	1700	0.71 J	ND(5)	900000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	5300	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	9.2	--	ND(10)
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	--	2540	ND(0.2)	ND(100)	18.3	--	--	ND(5)	--	--	--	--	23.8
Marketing Tank Farm Wells	MKTF-16	12/28/20	--	2680	ND(0.2)	ND(100)	19.1	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	1100	0.24	--	--	--	2.5	ND(5)	--	--	--	--	57
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	55	ND(0.2)	--	--	--	0.51 J	ND(5)	--	--	1.4	--	55
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	21000	3400	ND(0.2)	--	6.2 J	880 J	ND(5)	ND(5)	310000	--	--	ND(50)	ND(10)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	3400	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	5.1	--	ND(10)
Marketing Tank Farm Wells	MKTF-18	12/16/20	26100	2350	ND(0.2)	ND(100)	ND(6)	1110 JB	ND(5)	ND(5)	251000	ND(1)	ND(5) UJ	--	ND(20)
Marketing Tank Farm Wells	MKTF-18	03/11/21	--	2400	ND(0.2)	ND(8)	3.6 J+	--	ND(1)	1.6 J	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-18	06/23/21	32000	2500	ND(0.2)	ND(8)	5.2 J	800 J	ND(1)	ND(5)	330000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	32000	1800 J	ND(0.2)	--	8.6 J	2900 J	ND(5)	ND(5)	300000	--	--	3.1 J	ND(10) UJ
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	2400	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	3.8	--	ND(10)
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	12000	2100	ND(0.2)	120	31 J+	11000	2.9	ND(5)	130000	ND(0.25)	--	--	1500
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	34900	2840	ND(0.2)	ND(100)	44.2	5150	ND(5)	ND(5)	438000	ND(1)	16.1	--	ND(20)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Marketing Tank Farm Wells	MKTF-24	03/09/21	4600	ND(5)	2.5 J	670	ND(2)	700	ND(2)	--	ND(6)	14	ND(6)	1800	5.1
Marketing Tank Farm Wells	MKTF-24	06/16/21	7800	ND(1)	3.2	690	ND(2)	690	ND(2)	200000	ND(6)	13	ND(6)	3200	5.6
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	2.9	770	--	--	ND(2)	--	ND(6)	--	0.63 J	670 J+	2.2
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	3.5	910	--	--	ND(2)	--	ND(6)	--	0.8 J+	770	1.9
Marketing Tank Farm Wells	MKTF-25	12/18/20	4980	ND(2)	3.67	341	ND(3)	710	ND(5)	166000	ND(10)	ND(10)	ND(20)	4070	2.23
Marketing Tank Farm Wells	MKTF-25	03/05/21	3200 J+	ND(1)	2.7 J+	310	ND(2)	730	ND(2)	--	ND(6)	5.4 J	4.9 J	2300 J+	1.5 J
Marketing Tank Farm Wells	MKTF-25	06/17/21	300	ND(1)	3.6	290 J-	ND(2)	690	ND(2)	140000	ND(6)	3.3 J	ND(6)	1800	ND(2.5)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	3.1	320	--	--	ND(2)	--	ND(6)	--	0.94 J	960 J+	0.19 J
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	3.5	310	--	--	ND(2)	--	ND(6)	--	1.3	1900	0.36 J
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	930	ND(20)	ND(10)	60.2	ND(3)	531	ND(5)	248000	ND(10)	ND(10)	ND(20)	779	ND(10)
Marketing Tank Farm Wells	MKTF-27	03/05/21	1300 J+	ND(5)	ND(5)	76	ND(10)	400	ND(10)	--	ND(30)	ND(30)	ND(30)	700 J+	0.44 J
Marketing Tank Farm Wells	MKTF-27	06/16/21	1100	ND(5)	ND(5)	53	ND(2)	490	ND(2)	180000	ND(6)	4.5 J	4.9 J	550	0.46 J
Marketing Tank Farm Wells	MKTF-27	09/15/21	860 J	ND(1)	0.72 J	68	ND(2)	600	ND(2)	150000	ND(6)	2.8 J	3	410 J	0.44 J
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	ND(5)	86	--	--	ND(2)	--	ND(6)	--	3.5J/ND(5)U*	130	ND(2.5)
Marketing Tank Farm Wells	MKTF-28	12/18/20	1070	ND(2)	ND(1)	85.4	ND(3)	1620	ND(5)	59900	ND(10)	ND(10)	ND(20)	952	ND(1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	690 J+	ND(1)	1.2 J+	64	ND(2)	1400	ND(2)	--	ND(6)	ND(6)	ND(6)	380 J+	0.37 J
Marketing Tank Farm Wells	MKTF-28	06/16/21	2800	ND(1)	1.5	84	ND(2)	1500	ND(2)	59000	ND(6)	2.8 J	ND(6)	1600	1.7 J
Marketing Tank Farm Wells	MKTF-28	09/15/21	1600	ND(1)	1.5	120	ND(2)	2000	ND(2)	82000	ND(6)	4.2 J	3.9	880	0.88
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	1.7	140	--	--	ND(2)	--	ND(6)	--	4.6 JB	2200	2.5
Marketing Tank Farm Wells	MKTF-29	12/15/20	206	ND(2)	ND(1)	155	ND(3)	696	ND(5)	377000	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-29	03/09/21	970	ND(5)	ND(5)	160	ND(2)	640	ND(2)	--	ND(6)	7	ND(6)	330	0.27 J
Marketing Tank Farm Wells	MKTF-29	06/15/21	1200 J+	ND(1)	0.92 J	160 J	ND(2)	610	ND(2)	430000	ND(6)	5.1 J	8.2	450 J	0.35 J
Marketing Tank Farm Wells	MKTF-29	09/15/21	850	ND(1)	0.95 J	170	ND(2)	710	ND(2)	380000	ND(6)	5.5 J	6.6	260	0.22 J
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	1	240 J	--	--	ND(2)	--	ND(6)	--	3.6 J+	250	ND(2.5)
Marketing Tank Farm Wells	MKTF-30	12/15/20	961 J	ND(2)	ND(1)	42.6 J	ND(3)	693	ND(5)	77300	ND(10)	ND(10)	ND(20)	498 J	ND(1) UJ
Marketing Tank Farm Wells	MKTF-30	03/09/21	15000 J	ND(5)	1.3 J	210 J	ND(2)	750	ND(2)	--	6.1	6.8	7	5600 J	4.8
Marketing Tank Farm Wells	MKTF-30	06/15/21	5300 J+	ND(1)	0.72 J	64	ND(2)	760	ND(2)	100000	ND(6)	3.6 J	ND(6)	1900 J	0.96
Marketing Tank Farm Wells	MKTF-30	09/15/21	5700	ND(1)	0.82 J	88	ND(2)	740	ND(2)	97000	ND(6)	3.1 J	3.2	1800	1.5
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	0.63 J	45 J	--	--	ND(2)	--	ND(6)	--	2.4 J+	350	0.32 J
Marketing Tank Farm Wells	MKTF-31	12/18/20	2620 J	ND(2)	ND(1)	151	ND(3)	625	ND(5)	109000	ND(10)	ND(10)	ND(20)	1500 J	1.11
Marketing Tank Farm Wells	MKTF-31	03/05/21	2000 J+	ND(1)	0.63 J+	140	ND(2)	550	ND(2)	--	ND(6)	ND(6)	ND(6)	650 J+	0.54
Marketing Tank Farm Wells	MKTF-31	06/17/21	1100	ND(1)	0.74 J	110 J-	ND(2)	660	ND(2)	96000	ND(6)	2.7 J	ND(6)	430	0.31 J
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	0.94 J	130	--	--	ND(2)	--	ND(6)	--	2.9 J	1300	1.3
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	0.72 J	130	--	--	ND(2)	--	ND(6)	--	2.3 J+	620	0.48 J
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(200)	ND(2)	2.78	43.2	ND(3)	1130	ND(5)	21700 JB	ND(10)	ND(10)	ND(20)	ND(200)	1.68
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	110 J+	ND(1)	2.7	47	ND(2)	1100	ND(2)	25000	ND(6)	ND(6)	ND(6)	41 J	0.12 J
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	2.4	49	--	--	ND(2)	--	ND(6)	--	1.4	33 J	0.13 J
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	2.8 J	56	--	--	ND(2)	--	ND(6)	--	2.1 J	290	0.34 J
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	4200	ND(1)	1.8	180	ND(2)	610	ND(2)	92000	3 J	3.1 J	ND(6)	4200	3.3
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	0.55 J	81	--	--	ND(2)	--	ND(6)	--	1.2	110	0.14 J
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	0.59 J	72	--	--	ND(2)	--	ND(6)	--	3.1 J	41 J+	0.064 J
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	21000 J+	ND(5) UJ	4 J	5800	ND(2)	260	ND(2)	--	9.7	14 J	12	15000 J	15 J
Marketing Tank Farm Wells	MKTF-35	06/23/21	20000 J+	ND(1)	3.8 J+	4100	ND(2)	330	ND(2)	240000	8.8	11	8.4 J	14000	10 J
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	0.66 J	3500	--	--	ND(2)	--	ND(6)	--	1	7100	1.3
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	0.52 J	3500	--	--	ND(2)	--	ND(6)	--	ND(1)	6900	0.54
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	52 J+	ND(1)	16 J+	7400	ND(2)	320	ND(2)	140000	ND(6)	3.2 J	ND(6)	16000	2.5
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	730 J+	ND(1) UJ	0.53 J	27	ND(2)	450	ND(2)	--	ND(6)	ND(6)	ND(6)	220	0.16J/ND(0.5)U*
Marketing Tank Farm Wells	MKTF-38	06/23/21	2300 J+	ND(1)	0.73 J+	59	ND(2)	480	ND(2)	200000	ND(6)	4.1 J	ND(6)	760	0.52
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	1.1	180 J+	--	--	ND(2)	--	2.2 J	--	2.7 JB	2900 J	2.5
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	0.93 J	45	--	--	ND(2)	--	ND(6)	--	1.9	390	0.53
Marketing Tank Farm Wells	MKTF-39	12/16/20	13500	ND(2)	1.92	30400	ND(3)	467	ND(5)	601000	ND(10)	ND(10)	ND(20)	28500	11.4
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	3650 J+	ND(2)	ND(1)	116	ND(3)	2140	ND(5)	242000	ND(10)	ND(10)	ND(20)	1980	1.35 J
Marketing Tank Farm Wells	MKTF-40	03/05/21	1800 J+	ND(5)	ND(5)	80	ND(10)	2200	ND(10)	--	ND(30)	ND(30)	ND(30)	880 J+	0.96 J
Marketing Tank Farm Wells	MKTF-40	06/17/21	1900	ND(1)	0.95 J	68 J-	ND(2)	2000	ND(2)	250000	ND(6)	2.4 J	ND(6)	790	0.96 J
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	1.1 J	74	--	--	ND(2)	--	ND(6)	--	1.1	650 J+	0.81 J
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	0.88 J	86	--	--	ND(2)	--	ND(6)	--	ND(10)	950	0.83 J
Marketing Tank Farm Wells	MKTF-41	12/15/20	1430	ND(2)	1.95	77.3	ND(3)	765	ND(5)	14400 JB	ND(10)	ND(10)	ND(20)	764	ND(1)
Marketing Tank Farm Wells	MKTF-41	03/04/21	270	ND(1)	2.6	67	ND(2)	890	ND(2)	--	ND(6)	ND(6)	ND(6)	140 J+	0.12 J
Marketing Tank Farm Wells	MKTF-41	06/15/21	450 J+	ND(1)	2.3	71	ND(2)	850	ND(2)	14000	ND(6)	ND(6)	ND(6)	220 J	0.18 J
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	2	73	--	--	ND(2)	--	2.1 J	--	0.67 J	89	0.18 J
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	--	2.4	65	--	--	ND(2)	--	ND(6)	--	ND(1)	14 J	ND(0.5)
Marketing Tank Farm Wells	MKTF-42	12/16/20	270	ND(2)	2.15	53.6	ND(3)	722	ND(5)	18100 JB	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
	Cleanup Levels		NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Marketing Tank Farm Wells	MKTF-24	03/09/21	--	3400	ND(0.2)	ND(8)	34	--	ND(5)	4.2 J	--	ND(1.2)	--	--	7.5 J
Marketing Tank Farm Wells	MKTF-24	06/16/21	38000	3500	--	ND(8)	32	3600	1.1	ND(5)	710000	ND(1.2)	--	--	6.9 J
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	4000	ND(0.2)	--	--	--	0.82 J	ND(5)	--	--	--	--	8 J
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	4700	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	9.2	--	ND(10)
Marketing Tank Farm Wells	MKTF-25	12/18/20	32800	3200	ND(0.2)	ND(100)	27	3110	ND(5)	ND(5)	447000	ND(1)	46.2	--	ND(20)
Marketing Tank Farm Wells	MKTF-25	03/05/21	--	2800	ND(0.2)	ND(8)	22	--	ND(5)	2 J	--	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-25	06/17/21	28000	2700	ND(0.2)	ND(8)	22	1700	ND(1)	ND(5)	590000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	3000	ND(0.2)	--	--	--	0.56 J	ND(5)	--	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	2800	ND(0.2)	--	--	--	0.77 J	ND(5)	--	--	34	--	ND(10)
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	46700	295	ND(0.2)	ND(100)	34.4	14700	ND(50)	ND(5)	1810000	ND(10)	ND(50)	--	ND(20)
Marketing Tank Farm Wells	MKTF-27	03/05/21	--	81	ND(0.2)	ND(40)	27 J	--	3.7 J	ND(25)	--	ND(1.2)	--	--	ND(50)
Marketing Tank Farm Wells	MKTF-27	06/16/21	32000	49	ND(0.2)	ND(8)	29	10000	ND(5)	ND(5)	1800000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-27	09/15/21	28000	100 J	ND(0.2)	ND(8)	30	11000	1.4	ND(5)	1600000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	14	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	19	--	ND(10)
Marketing Tank Farm Wells	MKTF-28	12/18/20	13300	59	ND(0.2) UJ	ND(100)	ND(6)	2930	ND(5)	ND(5)	568000	ND(1)	125	--	ND(20)
Marketing Tank Farm Wells	MKTF-28	03/05/21	--	14	ND(0.2)	ND(8)	3.8 J	--	0.91 J	ND(5)	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-28	06/16/21	12000	110	ND(0.2)	ND(8)	5.2 J	2700	0.85 J	ND(5)	680000	ND(1.2)	--	--	13
Marketing Tank Farm Wells	MKTF-28	09/15/21	16000	510	ND(0.2)	ND(8)	5.7 J	3000	1.2	ND(5)	720000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	130	ND(0.2)	--	--	--	0.92 J	ND(5)	--	--	140	--	9.5 J
Marketing Tank Farm Wells	MKTF-29	12/15/20	58000	4770	ND(0.2)	ND(100)	19.7	1020	ND(5)	ND(5)	814000	ND(1)	18.5	--	ND(20)
Marketing Tank Farm Wells	MKTF-29	03/09/21	--	4700	ND(0.2)	ND(8)	15	--	ND(5)	11	--	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-29	06/15/21	68000	4600	ND(0.2)	ND(8)	18 J+	910 J	ND(5)	1.8 J	900000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-29	09/15/21	60000	4700	ND(0.2)	ND(8)	16	760 J	0.85 J	1.5 J	890000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	5800	ND(0.2)	--	--	--	0.62 J	ND(5)	--	--	20	--	ND(10)
Marketing Tank Farm Wells	MKTF-30	12/15/20	14800	60.3 J	ND(0.2)	ND(100)	15.6 J	ND(1000)	ND(5)	ND(5)	711000	ND(1)	32.2	--	ND(20)
Marketing Tank Farm Wells	MKTF-30	03/09/21	--	700 J	ND(0.2)	ND(8)	23	--	ND(5)	1.6 J	--	ND(1.2)	--	--	7.7 J
Marketing Tank Farm Wells	MKTF-30	06/15/21	20000	61	ND(0.2)	ND(8)	20 J+	2000	ND(5)	ND(5)	870000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-30	09/15/21	19000	150	0.23	ND(8)	16	1600	1.2	ND(5)	820000	ND(0.25)	--	--	7.4 J
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	38	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	37	--	ND(10)
Marketing Tank Farm Wells	MKTF-31	12/18/20	23700	61.6 J	ND(0.2) UJ	ND(100)	6.62	2020	ND(5)	ND(5)	354000	ND(1)	42.1	--	ND(20)
Marketing Tank Farm Wells	MKTF-31	03/05/21	--	43	ND(0.2)	ND(8)	5 J	--	0.67 J	1.7 J	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-31	06/17/21	19000	37	ND(0.2)	ND(8)	ND(10)	1400 JB	0.47 J	ND(5)	490000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	78	ND(0.2)	--	--	--	1	ND(5)	--	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	52	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	50	--	ND(10)
Marketing Tank Farm Wells	MKTF-32	12/15/20	4290 JB	63.7	ND(0.2)	ND(100)	ND(6)	ND(1000)	ND(5)	ND(5)	523000	ND(1)	52.7	--	ND(20)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	5000	65	ND(0.2)	ND(8)	4.8 J+	450 J	ND(1)	ND(5)	560000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	54	ND(0.2)	--	--	--	0.76 J	ND(5)	--	--	--	--	ND(10) UJ
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	61	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	50	--	ND(10)
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	21000	310	ND(0.2)	ND(8)	ND(10)	2600	ND(5)	ND(5)	380000	ND(0.25)	--	--	36
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	220	ND(0.2)	--	--	--	2.1	ND(5)	--	--	--	--	6.4 J
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	250	ND(0.2)	--	--	--	1.7	ND(5)	--	--	33	--	6.5 J+
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	--	5200	ND(0.2)	ND(8)	14 J+	--	2	3.2 J	--	ND(0.25)	--	--	27 J
Marketing Tank Farm Wells	MKTF-35	06/23/21	67000	4500	ND(0.2)	ND(8)	9.6 J	2400	1.5 J	ND(5)	250000	ND(0.25)	--	--	17 J
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	3400	ND(0.2)	--	--	--	0.88 J	ND(5)	--	--	--	--	ND(10) UJ
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	3400	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	0.67	--	ND(10)
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	44000	1800	ND(0.2)	ND(8)	4.8 J	930 J	ND(1)	ND(5)	230000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	--	240	ND(0.2)	ND(8)	ND(10)	--	5.2	4.2 J	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-38	06/23/21	39000	480	ND(0.2)	ND(8)	ND(10)	760 J	4.8	ND(5)	330000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	600	ND(0.2)	--	--	--	3.2	ND(5)	--	--	--	--	6.9 J
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	480	ND(0.2)	--	--	--	1.8	ND(5)	--	--	25	--	ND(10)
Marketing Tank Farm Wells	MKTF-39	12/16/20	162000	5510	ND(0.2)	ND(100)	15.4	18200	ND(10)	ND(5)	2740000	ND(1)	ND(5)	--	21.5
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	45600	87	ND(0.2)	ND(100)	12.5	8840	ND(5)	ND(5)	1880000	ND(1)	ND(5) UJ	--	ND(20)
Marketing Tank Farm Wells	MKTF-40	03/05/21	--	31 J	ND(0.2)	ND(40)	ND(50)	--	ND(5)	ND(25)	--	ND(1.2)	--	--	ND(50)
Marketing Tank Farm Wells	MKTF-40	06/17/21	51000	22	ND(0.2)	ND(8)	6.6 J	6300	1.9 J	1.3 J	2200000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	16	ND(0.2)	--	--	--	2.4 J	1.3 J	--	--	--	--	9.9 J
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	26	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	41	--	ND(10)
Marketing Tank Farm Wells	MKTF-41	12/15/20	1870 JB	49.1	ND(0.2)	ND(100)	ND(6)	2070	36	ND(5)	575000	ND(1)	13.3	--	ND(20)
Marketing Tank Farm Wells	MKTF-41	03/04/21	--	20	ND(0.2)	16	ND(10)	--	44	ND(5)	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-41	06/15/21	1800	26	ND(0.2)	13	ND(10)	1700	42	ND(5)	640000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	23	ND(0.2)	--	--	--	38	ND(5)	--	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	19	ND(0.2)	--	--	--	43	ND(5)	--	--	13	--	ND(10)
Marketing Tank Farm Wells	MKTF-42	12/16/20	2630 JB	41.3 J	ND(0.2)	ND(100)	ND(6) UJ	1730 JB	ND(5)	ND(5)	609000	ND(1)	ND(5) R	--	ND(20) UJ

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Marketing Tank Farm Wells	MKTF-42	03/04/21	340	ND(1)	2.5	54	ND(2)	810	ND(2)	--	ND(6)	ND(6)	ND(6)	190 J+	0.27 J
Marketing Tank Farm Wells	MKTF-42	06/15/21	580 J+	ND(1)	1.9	59	ND(2)	760	ND(2)	21000	ND(6)	ND(6)	ND(6)	310 J	0.5 J
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	--	1.5 J	65	--	--	ND(2)	--	ND(6)	--	0.74 J	270 J	0.43 J
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	--	2.9 J	50	--	--	ND(2)	--	ND(6)	--	ND(5)	22 J+	ND(0.5)
Marketing Tank Farm Wells	MKTF-43	12/15/20	6530	ND(2)	2	147	ND(3)	1280	ND(5)	1220000	ND(10)	ND(10)	ND(20)	5330	3.02 J
Marketing Tank Farm Wells	MKTF-43	03/04/21	3300	ND(5)	ND(10)	98	ND(10)	1300	ND(10)	--	ND(30)	ND(30)	ND(30)	2200 J+	2.4 J
Marketing Tank Farm Wells	MKTF-43	06/24/21	1700	ND(10)	ND(20)	84	ND(10)	1300	ND(10)	1700000	ND(30)	16 J	ND(30)	970	0.98 J
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	--	4 J	120	--	--	ND(20)	--	ND(60)	--	5.4 J	480 J	1.6J/ND(5)U*
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	--	4.6 J	120	--	--	ND(10)	--	ND(30)	--	ND(20)	4500	2.8 J
Marketing Tank Farm Wells	MKTF-44	12/23/20	3180 J	ND(2)	9.85	82.9	ND(3)	1760	ND(5)	16600	ND(10)	ND(10)	ND(20)	2800 J	1.93
Marketing Tank Farm Wells	MKTF-44	03/11/21	6100 J+	ND(1) UJ	12	120	ND(2)	1900	ND(2)	--	9.9	3.6 J	6.9	6500	7.1
Marketing Tank Farm Wells	MKTF-44	06/24/21	4400	ND(1)	13	81	ND(2)	1600	ND(2)	9100	5.2 J	ND(6)	ND(6)	3800	3.5
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	--	14	170	--	--	ND(2)	--	9.7	--	8.2	12000	13
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	--	14	99	--	--	ND(2)	--	5.9 J	--	3.8	4800	5.6
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	203	ND(2)	ND(1)	45.5	ND(3)	181	ND(5)	240000	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-46	03/04/21	560	ND(1)	0.81 J	46	ND(2)	180	ND(2)	--	ND(6)	4.1 J	ND(6)	290 J+	0.23 J
Marketing Tank Farm Wells	MKTF-46	06/16/21	980	ND(1)	1.2	51	ND(2)	190	ND(2)	210000	ND(6)	4.1 J	ND(6)	550	0.64 J
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	--	0.94 J	39	--	--	ND(2)	--	ND(6)	--	0.48 J	73	0.083 J
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	--	1.6	32	--	--	ND(2)	--	ND(6)	--	0.66 J	ND(50)	ND(0.5)
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	2400 J+	ND(1) UJ	0.63 J	110	ND(2)	280	ND(2)	--	11	ND(6)	ND(6)	1300	0.96
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	68100 J	ND(2)	2.02	7560	ND(3)	582	ND(5)	351000	33.4	14.7	25	48000 J	13.5
Marketing Tank Farm Wells	MKTF-49	03/09/21	3700	ND(1)	ND(5)	8900	ND(2)	660	ND(2)	--	ND(6)	8.5	ND(6)	18000	1.9J/ND(2.5)U*
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	6330	ND(2)	2.09 J	4130	ND(3)	887	ND(5)	117000	ND(10)	ND(10)	ND(20)	6790	1.34
Marketing Tank Farm Wells	MKTF-50	03/09/21	570	ND(1)	1.4	3300	ND(2)	980	ND(2)	--	ND(6)	5.4 J	ND(6)	2000	0.24J/ND(0.5)U*
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(200)	ND(2)	2.84 J	13.7	ND(3)	183	ND(5)	--	ND(10)	ND(10)	ND(20) UJ	213	ND(1) UJ
Production Wells	PW-3	03/12/21	77	ND(1)	2.8 J	11	ND(2)	220	ND(2)	--	ND(6)	2.8 J	ND(6)	1300	0.093 J
Production Wells	PW-3	06/29/21	ND(20)	ND(1) UJ	3.7	10	ND(2)	160	ND(2)	--	ND(6)	ND(6)	ND(6)	220	ND(0.5)
Production Wells	PW-3	09/17/21	--	--	3.2 J	12	--	--	ND(2)	--	ND(6)	--	ND(5)	38 J	ND(2.5)
Production Wells	PW-3	12/16/21	--	--	3.5	13	--	--	ND(2)	--	ND(6)	--	1.5 J	88 J	0.092 J
Production Wells	PW-4	12/28/20	ND(200)	ND(2)	1.71	15.6	ND(3)	ND(100)	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Production Wells	PW-4	03/12/21	ND(20)	ND(1)	2.4	13	ND(2)	72	ND(2)	--	ND(6)	ND(6)	ND(6)	160	ND(0.5)
Production Wells	PW-4	06/29/21	ND(20)	ND(1) UJ	1.8	13	ND(2)	70	ND(2)	--	ND(6)	ND(6)	ND(6)	940	ND(0.5)
Production Wells	PW-4	09/17/21	--	--	1.7 J	16	--	--	ND(2)	--	ND(6)	--	ND(5)	1200	ND(2.5)
Production Wells	PW-4	12/28/21	--	--	1.4	14	--	--	ND(2)	--	ND(6)	--	ND(1)	170	ND(0.5)
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	248	ND(2)	ND(1)	137	ND(3)	1460	ND(5)	24500	ND(10)	ND(10)	ND(20)	371	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	49	ND(5)	ND(5)	160	ND(2)	1400	ND(2)	--	ND(6)	ND(6)	ND(6)	44 J	0.44 J
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	40 J	ND(1)	2.5	2200	ND(2)	430	ND(2)	120000	ND(6) UJ	3.4 J	ND(6)	1100	0.27 J
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	0.87 J	210	--	--	--	--	ND(6)	--	2.2	190 J+	0.42 J
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	0.9 J	230 J	--	--	--	--	ND(6)	--	1.7 J+	160	0.44 J
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	23 J+	ND(1)	21 J+	3700	ND(2)	770	ND(2)	79000	ND(6)	ND(6)	ND(6)	9500	0.19 J
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	3090	ND(2)	3.53	2820	ND(3)	529	ND(5)	60600	ND(10)	ND(10)	ND(20)	2430	1.62
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	2800	ND(1)	2.8	2800	ND(2)	410	ND(2)	--	ND(6)	2.6 J	ND(6)	2300	1.5
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	570 J	ND(1)	1.7	3100	ND(2)	350	ND(2)	92000	ND(6) UJ	ND(6)	ND(6)	2300	0.34 J
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	1.8	3700	--	--	--	--	ND(6)	--	0.54 J	2300 J+	0.34 J
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	2.1	4000 J	--	--	--	--	ND(6)	--	0.71 J+	2300	0.52
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	364	ND(2)	4.22	2230	ND(3)	676	ND(5)	108000	ND(10)	ND(10)	ND(20)	2050	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	39	ND(5)	2.4 J	2300	ND(2)	520	ND(2)	--	ND(6)	5 J	ND(6)	640	0.17 J
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	100 J	ND(1)	0.77 J	150	ND(2)	1200	ND(2)	25000	ND(6) UJ	3.1 J	ND(6)	130	0.25 J
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	3.6	3300	--	--	--	--	ND(6)	--	0.73 J	1400 J+	0.31 J
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	2.9	2400 J	--	--	--	--	ND(6)	--	1.3 J+	1300	0.31 J
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	497	ND(2)	6.82	1010	ND(3)	1690	ND(5)	134000	ND(10)	ND(10)	ND(20)	2500	7.75
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	4000	ND(5)	7.2	850	ND(2)	1600	ND(2)	--	3.8 J	13	14 J	3600	8.3
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	930 J	ND(5)	6	870	ND(2)	1300	ND(2)	150000	ND(6) UJ	8.6	9.5	1800	7
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	8.6	1300	--	--	--	--	ND(30)	--	3.9	2000 J+	13
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	7.7	1000	--	--	--	--	ND(6)	--	3.2J/ND(5)U*	3000	8.6
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	5810 J	ND(2)	4.7	81.9 J	ND(3)	2140	ND(5)	187000	ND(10)	ND(10)	ND(20)	3280 J	1.37
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	540	ND(1)	4.4	18	ND(2)	2700	ND(2)	--	ND(6)	ND(6)	ND(6)	210	0.16J/ND(0.5)U*
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	5300	ND(5)	5.1 J	65	ND(2)	2600	ND(2)	230000	ND(6)	4.6 J	ND(6)	2300	1.1 J
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	5.4	110 J+	--	--	ND(2)	--	ND(6)	--	3.3 JB	3600 J	2.1 J
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	4.7 J	68	--	--	ND(2)	--	ND(6)	--	ND(10)	2000	1.4 J

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
Cleanup Levels			NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Marketing Tank Farm Wells	MKTF-42	03/04/21	--	72	ND(0.2)	26	ND(10)	--	1.2	ND(5)	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-42	06/15/21	2900	83	ND(0.2)	28	ND(10)	1700	0.94 J	ND(5)	710000	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	75	ND(0.2)	--	--	--	1.6	ND(5)	--	--	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	52	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	8.9	--	ND(10)
Marketing Tank Farm Wells	MKTF-43	12/15/20	175000	1850	ND(0.2)	ND(100)	6.79	10400 J	ND(5)	ND(5)	3000000	ND(1)	117	--	ND(20)
Marketing Tank Farm Wells	MKTF-43	03/04/21	--	930	ND(0.2)	ND(40)	ND(50)	--	ND(10)	15 J	--	ND(1.2)	--	--	ND(50)
Marketing Tank Farm Wells	MKTF-43	06/24/21	290000	3500	ND(0.2)	ND(40)	ND(50)	8400	ND(20)	9.5 J	4000000	ND(2.5)	--	--	ND(50)
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	19000	ND(0.2)	--	--	--	5.6 J	ND(50)	--	--	--	--	ND(100)
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	14000	ND(0.2)	--	--	--	ND(20)	ND(25)	--	--	290	--	ND(50)
Marketing Tank Farm Wells	MKTF-44	12/23/20	1000	60	ND(0.2)	ND(100)	ND(6)	3110	12.1	ND(5)	545000	ND(1)	166	--	ND(20)
Marketing Tank Farm Wells	MKTF-44	03/11/21	--	120	ND(0.2)	ND(8)	ND(10)	--	12	ND(5)	--	ND(0.25)	--	--	23
Marketing Tank Farm Wells	MKTF-44	06/24/21	950 J	74	ND(0.2)	ND(8)	ND(10)	2400	13	ND(5)	470000	ND(0.25)	--	--	12
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	240	ND(0.2)	--	--	--	15	ND(5)	--	--	--	--	53
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	88	ND(0.2)	--	--	--	14	ND(5)	--	--	150	--	22
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	47400	406	ND(0.2)	ND(100)	ND(6)	2890 JB	ND(5)	ND(5)	215000	ND(1)	ND(5) UJ	--	ND(20)
Marketing Tank Farm Wells	MKTF-46	03/04/21	--	450	ND(0.2)	ND(8)	ND(10)	--	1.6	3.3 J	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-46	06/16/21	47000	660	ND(0.2)	ND(8)	ND(10)	2100	0.41 J	ND(5)	220000	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	500	ND(0.2)	--	--	--	0.96 J	ND(5)	--	--	--	--	ND(10) UJ
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	580	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	7.9	--	ND(10)
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	--	71	ND(0.2)	ND(8)	ND(10)	--	5.3	3 J	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	84500	7890	ND(0.2)	ND(100)	30.8	10900	ND(5)	ND(5)	803000	ND(1)	ND(5)	--	45.6
Marketing Tank Farm Wells	MKTF-49	03/09/21	--	7900	ND(0.2)	ND(8)	4.7 J	--	ND(5)	6.5	--	ND(1.2)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	30900	2090	ND(0.2)	ND(100)	10.2	4760 JB	ND(5)	ND(5)	460000	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-50	03/09/21	--	2500	ND(0.2)	ND(8)	8.3 J	--	ND(1)	3.5 J	--	ND(0.25)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	--	19.3	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	46.4
Production Wells	PW-3	03/12/21	--	34	ND(0.2)	ND(8)	6.8 J	--	ND(5)	5.4	--	ND(0.25)	--	--	120
Production Wells	PW-3	06/29/21	--	16	ND(0.2)	ND(8)	3.3 J	--	1.2	ND(5)	--	ND(0.25)	--	--	29 J+
Production Wells	PW-3	09/17/21	--	6.6	ND(0.2)	--	--	--	ND(5)	--	--	--	--	--	ND(10)
Production Wells	PW-3	12/16/21	--	15	0.16 J	--	--	--	0.96 J	--	--	--	1.5	--	9.1 J
Production Wells	PW-4	12/28/20	--	ND(10)	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Production Wells	PW-4	03/12/21	--	4.5	ND(0.2)	ND(8)	ND(10)	--	0.87 J	4.1 J	--	ND(0.25)	--	--	8.2 J
Production Wells	PW-4	06/29/21	--	25	ND(0.2)	ND(8)	ND(10)	--	0.68 J	ND(5)	--	ND(0.25)	--	--	46 J+
Production Wells	PW-4	09/17/21	--	6.6	ND(0.2)	--	--	--	ND(5)	--	--	--	--	--	31 J
Production Wells	PW-4	12/28/21	--	5.1	ND(0.2)	--	--	--	0.93 J	--	--	--	1.5	--	13
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	4340	302	ND(0.2)	ND(100)	20.5	2700	ND(5)	ND(5)	455000	ND(1)	21	--	ND(20)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	310	ND(0.2)	ND(8)	22	--	ND(5)	ND(5)	--	ND(1.2)	--	--	ND(10)
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	22000	1700	ND(0.2)	ND(8)	20	370 J	ND(1)	ND(5)	400000	ND(0.25)	--	--	ND(10) UJ
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	440	ND(0.2)	--	--	--	0.53 J	--	--	--	--	--	8.9 J
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	500	ND(0.2)	--	--	--	0.42 J	--	--	--	19	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	18000	2000	ND(0.2)	15	11	310 J	0.58 J	ND(5)	360000	ND(0.25)	--	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	12200	736	ND(0.2)	ND(100)	11.9	1090	ND(5)	ND(5)	237000	ND(1)	ND(5)	--	ND(20)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	820	ND(0.2)	ND(8)	12	--	ND(1)	2 J	--	ND(0.25)	--	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	18000	1200	ND(0.2)	ND(8)	20	320 J	0.38 J	ND(5)	310000	ND(0.25)	--	--	ND(10) UJ
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	1300	ND(0.2)	--	--	--	0.78 J	--	--	--	--	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	1400	ND(0.2)	--	--	--	0.46 J	--	--	--	0.31 J	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	19100	1610	ND(0.2)	ND(100)	22.6 J	ND(1000)	ND(5)	ND(5)	339000	ND(1)	ND(5)	--	ND(20) UJ
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	1600	ND(0.2)	ND(8)	21	--	ND(5)	3.4 J	--	ND(1.2)	--	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	4700	240	ND(0.2)	ND(8)	22	2200	ND(1)	ND(5)	580000	ND(0.25)	--	--	ND(10) UJ
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	1900	ND(0.2)	--	--	--	0.59 J	--	--	--	--	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	1900	ND(0.2)	--	--	--	ND(1)	--	--	--	1.4	--	ND(10)
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	26500	1230	ND(0.2)	ND(100)	216	5530	ND(5)	ND(5)	1130000	ND(1)	45	--	20.5
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	--	1100	ND(0.2)	ND(8)	190	--	ND(5)	3.1 J	--	ND(1.2)	--	--	25 J
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	30000	1200	ND(0.2)	ND(8)	180	4300	ND(5)	ND(5)	1200000	ND(1.2)	--	--	23 J
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	1500	ND(0.2)	--	--	--	2	ND(25)	--	--	--	--	37 J
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	1400	ND(0.2)	--	--	--	ND(5)	--	--	--	25	--	16
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	54000	212 J	ND(0.2)	ND(100)	31.5	5770	ND(5)	ND(5)	2740000	ND(1)	138	--	ND(20)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	--	110	ND(0.2)	31	31 J+	--	1.4	4.9 J	--	ND(0.25)	--	--	7 J
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	75000	120	ND(0.2)	37	31	1700	ND(10)	ND(5)	2700000	ND(1.2)	--	--	15
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	140 J	ND(0.2)	--	--	--	2.8 J	ND(5)	--	--	--	--	7.2 J
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	120	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	110	--	ND(10)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
Cleanup Levels			19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	9480	ND(2)	1.57	102	ND(3)	2310	ND(5)	97600	37.9	ND(10)	ND(20)	4180	1.5
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	4100	ND(1)	1.7	74	ND(2)	2500	ND(2)	--	15	12	ND(6)	1700	0.77 J
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	16000 J+	ND(5) UJ	2.4	220	0.93 J	2300	ND(2)	110000	38	10	8.8	5300	3.1
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	12	3100	--	--	ND(2)	--	100	--	33	38000	42
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	1.3 J	41	--	--	ND(2)	--	6.1	--	2.2 J	880 J+	ND(2.5)
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	623 J	ND(2)	2.11	134	ND(3)	2180	ND(5)	113000	ND(10)	ND(10)	ND(20)	471 J	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	1800	ND(1)	2.6J/ND(5)U*	130	ND(2)	2400	ND(2)	--	ND(6)	5.6 J	5.5 J	1700	1.4J/ND(2.5)U*
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	180 J	ND(5)	1.7 J	100	ND(2)	2200	ND(2)	98000	ND(6) UJ	3.4 J	ND(6)	120	ND(2.5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	2.5	86 J+	--	--	ND(2)	--	ND(6)	--	ND(1)	130 J	0.089 J
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	2.5	89 J	--	--	ND(2)	--	ND(6)	--	0.76 J+	220	ND(2.5)
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	8750 J+	ND(2)	2.98	17.4	ND(3)	ND(100)	ND(5)	--	2360	32.4	ND(20)	26500	ND(1)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	7100	ND(1)	3.3	47	ND(2)	29 J	ND(2)	--	2000	30	ND(6)	20000	0.068J/ND(0.5)U*
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	3800 J	ND(5)	1.1 J	140	ND(2)	ND(40)	2	--	230 J	16	ND(6)	140000	ND(2.5)
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	2.1 J	260	--	--	27 J	--	5700	--	36	1000000	1.1J/ND(0.5)U*
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	ND(1)	190	--	--	51	--	3900	--	ND(1)	970000	ND(0.5)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	1620 J+	ND(2)	ND(1)	167	ND(3)	ND(100)	ND(5)	--	205	ND(10)	ND(20)	1640	ND(1)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	840	ND(1)	0.48J/ND(1)U*	98	ND(2)	14 J	ND(2)	--	99	6.1	ND(6)	5700	0.093J/ND(0.5)U*
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	37000 J	ND(10)	3 J	180	1.9 J	ND(40)	8.4 J	--	2700 J	39 J	ND(6)	290000 J	ND(5)
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	0.72 J	84	--	--	ND(20) UJ	--	270	--	ND(5)	170000	ND(2.5)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	ND(1)	88	--	--	16	--	500 J	--	ND(1)	330000	ND(0.5)
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	24500 J	ND(2)	3.01	4740	ND(3)	262	ND(5)	146000	12.8	ND(10)	21.1	17400 J	ND(1)
Tank Farm Wells	OW-57	03/12/21	11000	ND(1)	4.5	4200	ND(2)	300	ND(2)	--	6.6	4.9 J	9.4	10000	6.2
Tank Farm Wells	OW-57	06/23/21	5700 J+	ND(1)	4 J+	4200	ND(2)	290	ND(2)	--	ND(6)	4.3 J	ND(6)	9000	2.4
Tank Farm Wells	OW-57	09/16/21	790	ND(1)	3	3500	ND(2)	290	ND(2)	110000	ND(6)	ND(6)	0.59 J	5500	0.56
Tank Farm Wells	OW-57	12/14/21	--	--	3.2	3700 J	--	--	ND(2)	--	ND(6)	--	1.2 J+	5600	0.96
Tank Farm Wells	OW-58	12/22/20	1680 J	ND(2)	2.84	5000	ND(3)	337	ND(5)	131000	ND(10)	ND(10)	ND(20)	8650	ND(1)
Tank Farm Wells	OW-58	03/12/21	440	ND(1)	3.4	4600	ND(2)	360	ND(2)	--	ND(6)	3 J	ND(6)	10000	0.21J/ND(0.5)U*
Tank Farm Wells	OW-58	06/23/21	940 J+	ND(1)	4.2 J+	4500	ND(2)	350	ND(2)	--	ND(6)	2.5 J	ND(6)	9900	0.34 J
Tank Farm Wells	OW-58	09/16/21	460	ND(1)	3.8	4700	ND(2)	350	ND(2)	130000	ND(6)	ND(6)	0.41 J	9400	0.18 J
Tank Farm Wells	OW-58	12/14/21	--	--	3.9	5000 J	--	--	ND(2)	--	ND(6)	--	0.77 J+	11000	0.29 J
Tank Farm Wells	OW-58A	12/23/20	409 J	ND(2)	4.41	711	ND(3)	426	ND(5)	67700	ND(10)	ND(10)	ND(20)	4400 J	1.73
Tank Farm Wells	OW-58A	03/12/21	960	ND(1)	4.7	840	ND(2)	550	ND(2)	--	ND(6)	ND(6)	ND(6)	5100	1.6
Tank Farm Wells	OW-58A	06/23/21	2100 J+	ND(1)	4.3 J+	800	ND(2)	470	ND(2)	--	ND(6)	ND(6)	ND(6)	4700	2.7
Tank Farm Wells	OW-58A	09/16/21	4900	ND(1)	4.4	920	ND(2)	490	ND(2)	78000	ND(6)	ND(6)	2.2	6600	4.4
Tank Farm Wells	OW-58A	12/14/21	--	--	4.3	960 J	--	--	ND(2)	--	ND(6)	--	0.71 J+	5300	1.8
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(200)	ND(2)	8.59	4370	ND(3)	328	ND(5)	80900	ND(10)	ND(10)	ND(20)	6440	ND(1)
Tank Farm Wells	OW-63	03/03/21	ND(20)	ND(1)	9.4	3900	ND(2)	330	ND(2)	--	ND(6)	ND(6)	ND(6)	5900 J+	0.097 J
Tank Farm Wells	OW-63	06/15/21	54	ND(1)	9	4500	ND(2)	360	ND(2)	86000	ND(6)	ND(6)	ND(6)	6800	0.12 J
Tank Farm Wells	OW-63	09/29/21	--	--	8.1	4300	--	--	ND(2)	--	ND(6)	--	ND(1)	6600	0.11
Tank Farm Wells	OW-63	12/17/21	--	--	8.6	4300	--	--	ND(2)	--	ND(6)	--	ND(1)	6600	0.094 J
Tank Farm Wells	OW-64	12/11/20	1060	ND(2)	2.51	323	ND(3)	1720	ND(5)	12100 JB	ND(10)	ND(10)	ND(20)	603	ND(1)
Tank Farm Wells	OW-64	03/03/21	2600 J+	ND(1)	2.5	330	ND(2)	1400	ND(2)	--	ND(6)	ND(6)	ND(6)	880 J+	0.69
Tank Farm Wells	OW-64	06/29/21	2600	ND(1) UJ	2.8	270	ND(2)	1800	ND(2)	12000	2.9 J	ND(6)	ND(6)	910	0.6
Tank Farm Wells	OW-64	09/23/21	--	--	4.3	330	--	--	ND(2)	--	ND(6)	--	1.6	890	0.75 JB
Tank Farm Wells	OW-64	12/29/21	--	--	3.1	350 J+	--	--	ND(2)	--	2.7 J	--	2.5 J	940	0.69
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	--	--	0.38	20	--	--	ND(2)	--	4.5	--	2.7	130	ND(0.5)
Western Boundary Wells	BW-1C	09/12/18	--	ND(1)	ND(1)	37	ND(2)	--	ND(2)	--	4.1	--	ND(6)	290	0.77
Western Boundary Wells	BW-1C	08/14/19	100	ND(1)	ND(2)	19	ND(2)	1700	ND(2)	--	2.6	ND(6)	ND(6)	54	ND(0.5)
Western Boundary Wells	BW-1C	09/20/20	60 JB	ND(1)	ND(1)	17	ND(2)	1600	ND(2)	--	ND(6)	ND(6)	ND(6)	47 J-	ND(0.5)
Western Boundary Wells	BW-1C	09/29/21	--	--	ND(1)	18	--	--	ND(2)	--	ND(6)	--	ND(1)	40 J	ND(0.5)
Western Boundary Wells	BW-2A	09/13/17	--	--	7.5	160	--	--	ND(2)	--	3.6	--	3.3	1200	0.68
Western Boundary Wells	BW-2A	09/12/18	--	ND(1)	7.8	130	0.29	--	ND(2)	--	ND(6)	--	ND(6)	430	ND(0.5)
Western Boundary Wells	BW-2A	08/14/19	270	ND(1)	8.5	150	ND(2)	850	ND(2)	8600	ND(6)	ND(6)	ND(6)	490	0.12
Western Boundary Wells	BW-2A	09/20/20	610	ND(1)	9	150	ND(2)	800	ND(2)	--	2.6 J	8.8	ND(6)	740 J-	0.29 J
Western Boundary Wells	BW-2A	09/29/21	--	--	7.4	280	--	--	ND(2)	--	13	--	3	6100	3
Western Boundary Wells	BW-2B	09/13/17	--	--	2.1	87	--	--	ND(2)	--	7.8	--	4.2	3200	2
Western Boundary Wells	BW-2B	09/12/18	--	ND(1)	0.77	37	ND(2)	--	ND(2)	--	ND(6)	--	ND(6)	240	ND(0.5)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
Cleanup Levels			NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	16600	144	ND(0.2)	ND(100)	90.2	5030	15.2	ND(5)	1400000	ND(1)	53.2	--	ND(20)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	--	84	ND(0.2)	ND(8)	75 J+	--	21	1.8 J	--	ND(0.25)	--	--	ND(10)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	20000	270	ND(0.2)	ND(8) UJ	110	4300	20	3.1 J	1300000	ND(0.25)	--	--	15
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	4000	ND(0.8)	--	--	--	33	ND(5)	--	--	--	--	130
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	21	ND(0.2)	--	--	--	16	ND(5)	--	--	52	--	ND(10)
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	16500	10.1	ND(0.2)	ND(100)	ND(6)	7370	ND(5)	ND(5)	1610000	ND(1)	28.4	--	ND(20)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	--	52	ND(0.2)	17	ND(10)	--	6.7	2.3 J	--	ND(1.2)	--	--	22
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	14000	2.3	ND(0.2)	12	ND(10)	5900	6.1	ND(5)	1500000	ND(1.2)	--	--	ND(10) UJ
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	2.2	ND(0.2)	--	--	--	6.3	ND(5)	--	--	--	--	ND(10)
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	7	ND(0.2)	--	--	--	5.5	ND(5)	--	--	36	--	ND(10)
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	3180	ND(0.2)	ND(100)	4130	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	64.8
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	3000	ND(0.2)	ND(8)	3800	--	0.74 J	ND(5)	--	ND(0.25)	--	--	370
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	8200	ND(0.2)	21	1500	--	ND(5)	ND(5)	--	ND(1.2)	--	--	37 J
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	11000	ND(0.2)	--	--	--	ND(10)	ND(50)	--	--	--	--	1300
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	12000	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	ND(0.5)	--	ND(10)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	851	ND(0.2)	ND(100)	119	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	1900	ND(0.2)	ND(8)	220	--	ND(1)	8.3	--	ND(0.25)	--	--	39
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	3300 J	ND(0.2)	ND(8) UJ	7200 J	--	ND(10)	ND(5)	--	ND(2.5)	--	--	620 J
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	9100	ND(0.2)	--	--	--	ND(5)	ND(50)	--	--	--	--	ND(100) UJ
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	15000	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	ND(0.5)	--	ND(10)
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	20600	3990	ND(0.2)	ND(100)	78.8	3490	ND(5)	ND(5)	237000	ND(1)	ND(5)	--	22.7
Tank Farm Wells	OW-57	03/12/21	--	3400	ND(0.2)	ND(8)	75 J+	--	1.9	ND(5)	--	ND(0.25)	--	--	11
Tank Farm Wells	OW-57	06/23/21	--	2500	ND(0.2)	ND(8)	70	--	0.81 J	ND(5)	--	ND(0.25)	--	--	7 J
Tank Farm Wells	OW-57	09/16/21	16000	1900	ND(0.2)	ND(8)	62	540 J	ND(1)	ND(5)	260000	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-57	12/14/21	--	2000	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	0.25 J	--	ND(10)
Tank Farm Wells	OW-58	12/22/20	35800	2050	ND(0.2) UJ	ND(100)	25.7 J	ND(1000)	ND(5)	ND(5) R	274000	ND(1)	ND(5)	--	ND(20)
Tank Farm Wells	OW-58	03/12/21	--	1900	ND(0.2)	ND(8)	35 J+	--	ND(1)	1.6 J	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-58	06/23/21	--	1800	ND(0.2)	ND(8)	37	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-58	09/16/21	40000	1800	ND(1)	ND(8)	40	540 J	0.58 J	ND(5)	270000	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-58	12/14/21	--	1800	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	0.17 J	--	ND(10)
Tank Farm Wells	OW-58A	12/23/20	21100	1360	ND(0.2)	ND(100)	30.7	ND(1000)	ND(5)	ND(5)	395000	ND(1)	ND(5)	--	ND(20)
Tank Farm Wells	OW-58A	03/12/21	--	1400	ND(0.2)	ND(8)	33 J+	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-58A	06/23/21	--	1200	ND(0.2)	ND(8)	30	--	0.47 J	ND(5)	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-58A	09/16/21	25000	1400	ND(0.2)	ND(8)	33	1200	0.66 J	ND(5)	490000	ND(0.25)	--	--	7.6 J
Tank Farm Wells	OW-58A	12/14/21	--	1300	ND(0.2)	--	--	--	0.44 J	ND(5)	--	--	0.1 J	--	ND(10)
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	15300	1050	ND(0.2)	ND(100)	22.5	ND(1000)	ND(5)	ND(5)	262000	ND(1)	ND(5)	--	ND(20)
Tank Farm Wells	OW-63	03/03/21	--	930	ND(0.2)	ND(8)	22	--	ND(1)	ND(5) UJ	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-63	06/15/21	17000	1100	--	ND(8)	27	720 J	ND(1)	ND(5)	300000	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-63	09/29/21	--	990	ND(0.2)	--	--	--	0.42	ND(5)	--	--	--	--	ND(10)
Tank Farm Wells	OW-63	12/17/21	--	1000	ND(0.2)	--	--	--	0.39 J	ND(5)	--	--	ND(0.5)	--	ND(10)
Tank Farm Wells	OW-64	12/11/20	3450 JB	331	ND(0.2)	ND(100)	ND(6)	1400	ND(5)	ND(5)	400000	ND(1)	14	--	ND(20)
Tank Farm Wells	OW-64	03/03/21	--	320	ND(0.2)	18	4.8 J	--	1.3	ND(5) UJ	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-64	06/29/21	3800	330	ND(0.2)	24	ND(10)	1500	ND(1)	ND(5)	460000	ND(0.25)	--	--	ND(10) UJ
Tank Farm Wells	OW-64	09/23/21	--	390	ND(0.2)	--	--	--	0.79 J	ND(5)	--	--	--	--	ND(10) UJ
Tank Farm Wells	OW-64	12/29/21	--	330	ND(0.2)	--	--	--	0.4 J	ND(5)	--	--	11	--	ND(10)
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	--	15	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	9.9	--	ND(10)
Western Boundary Wells	BW-1C	09/12/18	--	38	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	8.1	1.2	ND(10)
Western Boundary Wells	BW-1C	08/14/19	--	10	ND(0.2)	12	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	9.4	--	ND(10)
Western Boundary Wells	BW-1C	09/20/20	--	9.5	ND(0.2)	12	ND(10)	--	ND(1)	ND(5)	--	ND(0.25) UJ	8.8	--	ND(10)
Western Boundary Wells	BW-1C	09/29/21	--	9.4	ND(0.2)	--	--	--	ND(1)	--	--	--	--	--	ND(10)
Western Boundary Wells	BW-2A	09/13/17	--	170	ND(0.2)	--	--	--	1.9	ND(5)	--	--	ND(0.5)	--	ND(10)
Western Boundary Wells	BW-2A	09/12/18	--	140	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	ND(0.5)	0.93	ND(10)
Western Boundary Wells	BW-2A	08/14/19	3200	150	ND(0.2)	8.3	ND(10)	300	ND(1)	ND(5)	370000	ND(0.5)	ND(0.5)	--	ND(10)
Western Boundary Wells	BW-2A	09/20/20	--	170	ND(0.2)	ND(8)	ND(10)	--	ND(1)	ND(5)	--	ND(0.25) UJ	0.098 J	--	ND(10) UJ
Western Boundary Wells	BW-2A	09/29/21	--	420	ND(0.2)	--	--	--	0.72 J	--	--	--	--	--	7.8 J
Western Boundary Wells	BW-2B	09/13/17	--	220	ND(0.2)	--	--	--	2.9	ND(5)	--	--	14	--	7
Western Boundary Wells	BW-2B	09/12/18	--	150	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	10	3.1	ND(10)

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Total (µg/L)	Antimony, Total (µg/L)	Arsenic, Total (µg/L)	Barium, Total (µg/L)	Beryllium, Total (µg/L)	Boron, Total (µg/L)	Cadmium, Total (µg/L)	Calcium, Total (µg/L)	Chromium, Total (µg/L)	Cobalt, Total (µg/L)	Copper, Total (µg/L)	Iron, Total (µg/L)	Lead, Total (µg/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	50	5.98	790	13,822	15
Western Boundary Wells	BW-2B	08/14/19	4500	ND(1)	0.98	57	ND(2)	1900	ND(2)	--	2.7	ND(6)	ND(6)	1600	0.92
Western Boundary Wells	BW-2B	09/21/20	250	ND(1)	0.84 J	40	ND(2)	1800	ND(2)	--	ND(6)	ND(6)	ND(6)	280 J+	0.054 J
Western Boundary Wells	BW-2B	09/29/21	--	--	0.76 J	44	--	--	ND(2)	--	ND(6)	--	1	300	ND(0.5)
Western Boundary Wells	BW-2C	09/13/17	--	--	0.76	25	--	--	ND(2)	--	9	--	3.5	410	0.5
Western Boundary Wells	BW-2C	09/18/18	--	--	ND(5)	50	--	--	ND(2)	--	6	--	ND(6)	2000	2.4
Western Boundary Wells	BW-2C	08/14/19	12000	ND(1)	2.3	86	0.32	1200	ND(2)	--	18	ND(6)	ND(6)	3900	4.4
Western Boundary Wells	BW-2C	09/22/20	94000 J+	ND(1)	5.1	550	3.3	1300	ND(2)	--	50	17	6.3	44000 J+	20
Western Boundary Wells	BW-2C	09/29/21	--	--	2	190	--	--	ND(2)	--	13	--	2.9	7300	5.3
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	5.2	120	--	--	ND(2)	--	1.8	--	2.7	1100	0.75
Western Boundary Wells	BW-3B	09/12/18	--	ND(1)	4.9	110	ND(2)	--	ND(2)	--	2.4	--	ND(6)	870	0.35
Western Boundary Wells	BW-3B	08/14/19	86	ND(1)	6.1	110	ND(2)	1100	ND(2)	--	ND(6)	ND(6)	ND(6)	430	0.094
Western Boundary Wells	BW-3B	09/21/20	130	ND(1)	5.7	110	ND(2)	1100	ND(2)	--	ND(6)	ND(6)	ND(6)	450 J+	0.07 J
Western Boundary Wells	BW-3B	09/29/21	--	--	4.9	140	--	--	ND(2)	--	4.1 J	--	0.44 J	1300	0.7
Western Boundary Wells	BW-3C	09/13/17	--	--	1.6	32	--	--	ND(2)	--	15	--	4.5	620	0.4
Western Boundary Wells	BW-3C	09/18/18	--	--	2.2	240	--	--	ND(2)	--	27	--	ND(6)	3900	3
Western Boundary Wells	BW-3C	08/14/19	6600	ND(1)	1.4	80	ND(2)	1000	ND(2)	--	16	ND(6)	4.1	1700	1.4
Western Boundary Wells	BW-3C	09/22/20	31000 J+	ND(1)	1.2	180	ND(2)	1100	ND(2)	--	16	5.2 J	ND(6)	8200 J+	2.7
Western Boundary Wells	BW-3C	09/29/21	--	--	1.1	100	--	--	ND(2)	--	8.1	--	1.2	5800	1.5
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	10000	ND(1)	10	140	0.55	2300	ND(2)	--	21	ND(6)	9.1	4800	2.8
Western Boundary Wells	BW-4B	03/10/20	13000	ND(1)	9.8	120	0.38 J	2200	ND(2)	--	19	ND(6)	7.3	6900	1.7
Western Boundary Wells	BW-4B	03/10/21	7300 J+	ND(1) UJ	7.2	120	ND(2)	2400	ND(2)	--	20	ND(6)	10	3700	1.9
Western Boundary Wells	BW-4B	09/29/21	--	--	6.6	95	--	--	ND(2)	--	15	--	6.9	4700	1.8
Western Boundary Wells	BW-4B	12/08/21	--	--	7.7	95	--	--	ND(2)	--	14	--	6.9	3100	2
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	629	ND(2)	ND(1)	229	ND(3)	342	ND(5)	8170 JB	ND(10)	ND(10)	ND(20)	ND(2000)	ND(1)
Western Boundary Wells	BW-5B	03/03/21	410 J+	ND(1)	1	220	ND(2)	360	ND(2)	--	ND(6)	ND(6)	ND(6)	160 J+	0.081 J
Western Boundary Wells	BW-5B	06/29/21	490	ND(1) UJ	0.94 J	240	ND(2)	340	ND(2)	--	ND(6)	ND(6)	ND(6)	160	0.063 J
Western Boundary Wells	BW-5B	09/23/21	--	--	0.91 J	260	--	--	ND(2)	--	2.9 J	--	ND(1)	290	0.37J/ND(0.5)U*
Western Boundary Wells	BW-5B	12/08/21	--	--	0.91 J	270	--	--	ND(2)	--	ND(6)	--	4.5 J	110	ND(0.5)
Western Boundary Wells	BW-5C	12/09/20	10600	ND(2)	ND(1)	256	ND(3)	515	ND(5)	88900	17.4	ND(10)	ND(20)	4020	1.81
Western Boundary Wells	BW-5C	03/03/21	5800 J+	ND(1)	ND(5)	170	ND(2)	540	ND(2)	--	6.5	ND(6)	ND(6)	1900 J+	1 J
Western Boundary Wells	BW-5C	06/29/21	9800	ND(5) UJ	0.79 J	250	ND(2)	540	ND(2)	90000	9.4	ND(6)	ND(6)	3200	2 J
Western Boundary Wells	BW-5C	09/23/21	--	--	2.3	780	--	--	ND(2)	--	40	--	9.8	13000	9.7
Western Boundary Wells	BW-5C	12/08/21	--	--	1 J	310	--	--	ND(2)	--	21	--	4.7 J	4500	2.9

TABLE 5-3. TOTAL METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Total (µg/L)	Manganese, Total (µg/L)	Mercury, Total (µg/L)	Molybdenum, Total (µg/L)	Nickel, Total (µg/L)	Potassium, Total (µg/L)	Selenium, Total (µg/L)	Silver, Total (µg/L)	Sodium, Total (µg/L)	Thallium, Total (µg/L)	Uranium, Total (µg/L)	Vanadium, Total (µg/L)	Zinc, Total (µg/L)
	Cleanup Levels		NA	2,017	2	98.7	372	NA	50	50	NA	2	30	63.1	5,960
Western Boundary Wells	BW-2B	08/14/19	--	180	ND(0.2)	20	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	12	--	11
Western Boundary Wells	BW-2B	09/21/20	--	140	ND(0.2)	19	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	11	--	ND(10)
Western Boundary Wells	BW-2B	09/29/21	--	150	ND(0.2)	--	--	--	0.41 J	--	--	--	--	--	ND(10)
Western Boundary Wells	BW-2C	09/13/17	--	39	ND(0.2)	--	--	--	0.92	ND(5)	--	--	4.7	--	5.1
Western Boundary Wells	BW-2C	09/18/18	--	59	0.045	--	--	--	ND(5)	3.5	--	--	5.5	--	15
Western Boundary Wells	BW-2C	08/14/19	--	96	ND(0.2)	8.8	12	--	0.77	ND(5)	--	0.4	7.2	--	24
Western Boundary Wells	BW-2C	09/22/20	--	930	ND(0.2) UJ	ND(8)	46 J+	--	3.4	ND(5)	--	0.37	9.1	--	76 J
Western Boundary Wells	BW-2C	09/29/21	--	260	ND(0.2)	--	--	--	1.7	--	--	--	--	--	17
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	120	ND(0.2)	--	--	--	1.6	ND(5)	--	--	0.2	--	4
Western Boundary Wells	BW-3B	09/12/18	--	120	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	0.16	2.6	ND(10)
Western Boundary Wells	BW-3B	08/14/19	--	110	ND(0.2)	13	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	0.12	--	ND(10)
Western Boundary Wells	BW-3B	09/21/20	--	100	ND(0.2)	11	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	0.1 J	--	ND(10)
Western Boundary Wells	BW-3B	09/29/21	--	120	ND(0.2)	--	--	--	ND(1)	--	--	--	--	--	ND(10) UJ
Western Boundary Wells	BW-3C	09/13/17	--	25	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	1.6	--	12
Western Boundary Wells	BW-3C	09/18/18	--	160	0.045	--	--	--	ND(5)	12	--	--	1.7	--	17
Western Boundary Wells	BW-3C	08/14/19	--	56	ND(0.2)	13	11	--	ND(1)	1.5	--	ND(0.5)	1.5	--	13
Western Boundary Wells	BW-3C	09/22/20	--	140	ND(0.2) UJ	7.2 J	12 J+	--	0.7 J	ND(5)	--	ND(0.25)	1.4	--	25 J
Western Boundary Wells	BW-3C	09/29/21	--	77	ND(0.2)	--	--	--	0.69 J	--	--	--	--	--	8.7 J
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	--	92	0.1	26	12	--	ND(1)	ND(5)	--	0.054	70	--	16
Western Boundary Wells	BW-4B	03/10/20	--	88	ND(0.2)	22	13	--	0.52 J-	ND(5)	--	ND(0.5)	76	--	12
Western Boundary Wells	BW-4B	03/10/21	--	71	ND(0.2)	23	18 J+	--	0.68 J	26	--	ND(0.25)	--	--	16
Western Boundary Wells	BW-4B	09/29/21	--	60	ND(0.2)	--	--	--	1.3	--	--	--	--	--	20
Western Boundary Wells	BW-4B	12/08/21	--	52	ND(0.2)	--	--	--	0.74 J	--	--	--	66	--	22
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	964 JB	19.9	ND(0.2)	ND(100)	ND(6)	1620	ND(5)	ND(5)	589000	ND(1)	29.9	--	ND(20)
Western Boundary Wells	BW-5B	03/03/21	--	17	ND(0.2)	ND(8)	4 J	--	1.2	ND(5) UJ	--	ND(0.25)	--	--	ND(10)
Western Boundary Wells	BW-5B	06/29/21	--	17	ND(0.2)	ND(8)	ND(10)	--	ND(5)	ND(5)	--	ND(0.25)	--	--	ND(10) UJ
Western Boundary Wells	BW-5B	09/23/21	--	20	ND(0.2)	--	--	--	1.3	--	--	--	--	--	ND(10) UJ
Western Boundary Wells	BW-5B	12/08/21	--	20	ND(0.2)	--	--	--	0.77 J	--	--	--	31	--	ND(10)
Western Boundary Wells	BW-5C	12/09/20	14600	94.7	0.474 J	ND(100)	13.4 J	4800	ND(5)	ND(5)	1200000	ND(1)	46	--	ND(20)
Western Boundary Wells	BW-5C	03/03/21	--	55	0.27	ND(8)	7.2 J	--	ND(5)	3 J	--	ND(0.25)	--	--	ND(10)
Western Boundary Wells	BW-5C	06/29/21	15000	96	0.23	ND(8)	5.9 J	4300	ND(5)	3.3 J	1200000	ND(1.2)	--	--	ND(10) UJ
Western Boundary Wells	BW-5C	09/23/21	--	320	0.33	--	--	--	4.3	--	--	--	--	--	31
Western Boundary Wells	BW-5C	12/08/21	--	110	0.26	--	--	--	ND(5)	--	--	--	48	--	16

Notes:
-- = Not Measured
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
µg/L = micrograms per liter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.
J = Estimated concentration
J- = Estimated concentration, possibly biased low
J+ = Estimated concentration, possibly biased high
JB = Estimated concentration due to blank contamination
R = Rejected, Data not usable
UJ = Estimated reporting limit
U = Evaluated to be undetected at the reported concentration
* = The first result represents the laboratory reported concentration. The second result was evaluated to be undetected at the reported concentration by the data validator. The result was determined to be a false positive.

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Deep Monitoring Wells	OW-01	12/11/20	ND(200)	ND(2)	ND(1)	ND(200)	ND(4)	376	ND(5)	--	ND(5)	ND(50)	ND(25)	ND(100)	ND(1)
Deep Monitoring Wells	OW-01	03/03/21	ND(20)	ND(1)	0.72 J	38	ND(2)	370	ND(2)	2400	ND(6)	ND(6)	ND(6) UJ	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-01	06/10/21	ND(20)	ND(1)	0.63 J	39	ND(2)	360	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-01	09/29/21	--	--	0.66 J	38	--	--	ND(2)	--	ND(6)	--	0.82J/ND(1)U*	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-01	12/08/21	--	--	0.69 J	38	--	--	ND(2)	--	ND(6)	--	ND(1)	15 J	ND(0.5)
Deep Monitoring Wells	OW-10	12/11/20	ND(200)	ND(2)	ND(1)	51.7	ND(3)	519	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Deep Monitoring Wells	OW-10	03/12/21	ND(20)	ND(5)	ND(5)	56	ND(2)	580	ND(2)	72000	ND(6)	ND(6)	ND(6)	ND(20)	0.095 J
Deep Monitoring Wells	OW-10	03/12/21	ND(20)	ND(5)	ND(5)	57	ND(2)	580	ND(2)	71000	ND(6)	ND(6)	ND(6)	ND(20)	0.098 J
Deep Monitoring Wells	OW-10	06/10/21	ND(20)	0.48 J	0.58 J	50	ND(2)	560	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	0.099 J
Deep Monitoring Wells	OW-10	09/23/21	--	--	1.1	75	--	--	ND(2)	--	ND(6)	--	2	ND(20)	0.095 J
Deep Monitoring Wells	OW-10	12/08/21	--	--	0.67 J	65	--	--	ND(2)	--	ND(6)	--	13	16 J	ND(2.5)
Deep Monitoring Wells	OW-11	09/18/17	--	--	2.6	7.8	--	--	ND(2)	12000	2	--	4.4	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-11	09/18/18	--	--	1.8	7.5	--	--	ND(2)	11000	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-11	08/20/19	7.3	ND(1)	1.9	6.8	ND(2)	1300	ND(2)	10000	ND(6)	ND(6)	4	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-11	09/20/20	7.2 J	ND(1)	2	8.5	ND(2)	1400	ND(2)	12000	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-11	09/30/21	--	--	2	7.3	--	--	--	--	--	--	ND(1)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-12	09/19/17	--	--	2	20	--	--	ND(2)	1600	4.1	--	ND(6)	49	ND(0.5)
Deep Monitoring Wells	OW-12	09/19/18	--	--	2	21	--	--	ND(2)	--	2.5	--	ND(6)	69	ND(0.5)
Deep Monitoring Wells	OW-12	09/17/20	27 J-	ND(1)	1.5	18	ND(2)	380	ND(2)	--	2.4 J	ND(6)	ND(6)	23	0.069 J
Deep Monitoring Wells	OW-12	09/30/21	--	--	1.6	20	--	--	--	--	--	--	ND(1)	22	0.064 J
Deep Monitoring Wells	OW-13	12/09/20	ND(200)	ND(2)	ND(1)	ND(200)	ND(4)	372	ND(5)	--	ND(5)	ND(50)	ND(25)	ND(100)	ND(1)
Deep Monitoring Wells	OW-13	03/02/21	ND(20)	ND(1)	0.84 J	23	ND(2) UJ	360	ND(2) UJ	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-13	06/09/21	9.4 J+	ND(1)	0.73 J	20	ND(2)	320	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-13	09/24/21	--	--	0.81 J	19	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Deep Monitoring Wells	OW-13	12/07/21	--	--	0.74 J	20	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	2.2	120	--	--	ND(2)	--	ND(6)	--	0.85 J	68	ND(0.5)
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	--	3.8	2100	--	--	ND(2)	--	ND(6)	--	ND(1)	3500	ND(0.5)
Eastern Boundary Wells	OW-14	12/30/21	--	--	3.5 J	2100	--	--	ND(2)	--	ND(6)	--	ND(5)	4300	ND(2.5)
Eastern Boundary Wells	OW-29	12/09/20	ND(200)	ND(2)	ND(1)	ND(200)	ND(4)	584	ND(5)	--	ND(5)	ND(50)	ND(25)	259	ND(1)
Eastern Boundary Wells	OW-29	03/02/21	ND(20)	ND(1)	0.74 J	86	ND(2) UJ	600	ND(2) UJ	--	ND(6)	ND(6)	ND(6)	300	ND(0.5)
Eastern Boundary Wells	OW-29	06/09/21	ND(20)	ND(1)	0.49 J	67	ND(2)	500	ND(2)	--	ND(6)	ND(6)	ND(6)	17 J	ND(0.5)
Eastern Boundary Wells	OW-29	09/24/21	--	--	0.69 J	100	--	--	ND(2)	--	ND(6)	--	1.5	94	0.24 J
Eastern Boundary Wells	OW-29	12/07/21	--	--	0.7 J	84	--	--	ND(2)	--	ND(6)	--	ND(1)	420	ND(0.5)
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	--	0.7 J	150	--	--	ND(2)	--	4.8 J	--	2.7	200	0.58
Eastern Boundary Wells	OW-30	12/30/21	--	--	0.78 J	140	--	--	ND(2)	--	ND(6)	--	3.4 J	200	0.71 J
Eastern Boundary Wells	OW-50	09/11/17	--	--	2.4	53	--	--	ND(2)	27000	ND(6)	--	ND(6)	31	ND(0.5)
Eastern Boundary Wells	OW-50	12/09/20	ND(200)	ND(2)	1.8	ND(200)	ND(4)	392	ND(5)	--	ND(5)	ND(50)	ND(25)	ND(100)	ND(1)
Eastern Boundary Wells	OW-50	03/02/21	ND(20)	ND(1)	2.1	53	ND(2) UJ	370	ND(2) UJ	27000	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Eastern Boundary Wells	OW-50	06/09/21	83 J+	ND(1)	1.8	51	ND(2)	350	ND(2)	--	ND(6)	ND(6)	ND(6)	47	ND(0.5)
Eastern Boundary Wells	OW-50	09/24/21	--	--	2.1	54	--	--	ND(2)	--	ND(6)	--	1.2	11 J	ND(0.5)
Eastern Boundary Wells	OW-50	12/07/21	--	--	1.9	53	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Eastern Boundary Wells	OW-52	12/09/20	ND(200)	ND(2)	ND(1)	ND(200)	ND(4)	362	ND(5)	--	ND(5)	ND(50)	ND(25)	ND(100)	ND(1)
Eastern Boundary Wells	OW-52	03/02/21	ND(20)	ND(1)	0.68 J	32	ND(2) UJ	380	ND(2) UJ	5000	ND(6)	ND(6)	ND(6)	79	ND(0.5)
Eastern Boundary Wells	OW-52	06/09/21	56 J+	ND(1)	0.92 J	32	ND(2)	460	ND(2)	--	ND(6)	ND(6)	ND(6)	33	ND(0.5)
Eastern Boundary Wells	OW-52	09/24/21	--	--	0.62 J	28	--	--	ND(2)	--	ND(6)	--	ND(1)	55	ND(0.5)
Eastern Boundary Wells	OW-52	12/07/21	--	--	0.58 J	29	--	--	ND(2)	--	ND(6)	--	ND(1)	60	ND(0.5)
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	8.2	170	--	--	ND(2)	--	ND(6)	--	0.87 J	350	10
Eastern Boundary Wells	OW-54	12/29/21	--	--	5.1 J	180	--	--	ND(2)	--	ND(6)	--	3.9 J	350	8.1
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	8.4 J	540	--	--	ND(2)	--	ND(6)	--	ND(1)	3800	ND(0.5)
Eastern Boundary Wells	OW-55	12/29/21	--	--	4.1 J	580	--	--	ND(2)	--	ND(6)	--	ND(10)	3600	ND(5)
Eastern Boundary Wells	OW-56	12/23/20	ND(200)	ND(2)	2.52	476	ND(3)	666	ND(5)	--	ND(10)	ND(10)	ND(20)	272	ND(1)
Eastern Boundary Wells	OW-56	03/10/21	34	ND(1)	4.5	570	ND(2) UJ	630	ND(2)	--	ND(6)	7.3	ND(6)	370	0.15 J
Eastern Boundary Wells	OW-56	06/22/21	10 J	ND(1)	5.5	490	ND(2)	550	ND(2) UJ	--	ND(6) UJ	6.3	ND(6)	560	ND(2.5)
Eastern Boundary Wells	OW-56	09/24/21	--	--	3.9	450	--	--	ND(2)	--	ND(6)	--	3.9	170	0.23 J
Eastern Boundary Wells	OW-56	12/23/21	--	--	2.8	410	--	--	ND(2)	--	ND(6)	--	3.5	47	0.17 J
Eastern Boundary Wells	OW-66	09/17/21	--	ND(10)	3.7 J	1100	ND(2)	--	ND(2)	--	ND(6)	8.4	--	3700	ND(5)
Eastern Boundary Wells	OW-66	12/07/21	--	--	4.9	1300	--	--	ND(2)	--	ND(6)	--	0.38 J	4300	1
Eastern Boundary Wells	OW-70	09/17/21	--	ND(1)	2.4	480	ND(2)	--	ND(2)	22000	ND(6)	6.6	--	13 J	0.22 J
Eastern Boundary Wells	OW-70	12/22/21	--	--	2.5	620	--	--	ND(2)	--	ND(6)	--	4.5	73	0.13 J
Evaporation Ponds	EP-2	11/21/19	130	ND(5)	7.9	140	0.53	330	ND(2)	100000	8.9	ND(6)	4	2700	ND(2.5)
Evaporation Ponds	EP-2	09/16/20	300 J+	ND(1)	6.2	210	ND(2)	430	ND(2)	150000	ND(6)	ND(6)	ND(6) UJ	1900	ND(2.5)
Evaporation Ponds	EP-2	09/17/20	6.5 J+	1.4	ND(1)	1.3 J	ND(2)	ND(40)	ND(2) UJ	450 J	ND(6)	ND(6) UJ	ND(6)	ND(20)	ND(0.5)
Evaporation Ponds	EP-2	12/21/20	290	ND(2)	5.09	177 J	ND(3)	432 J	--	--	ND(10)	ND(10)	ND(20)	1580 J	ND(1)
Evaporation Ponds	EP-2	06/21/21	85	ND(20)	7.8 J	240	ND(2)	630	ND(2)	--	2.4 J	6.8	ND(6)	420	ND(10)

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (µg/L)	Mercury, Dissolved (µg/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
	Cleanup Levels		NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Deep Monitoring Wells	OW-01	12/11/20	--	ND(15)	ND(0.2)	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	33.7	--	ND(20)
Deep Monitoring Wells	OW-01	03/03/21	270 J	3.9	ND(0.2)	ND(8)	ND(10)	790J/ND(1000)U*	2.4	ND(5)	320000	ND(0.5)	--	--	6.4J/ND(10)U*
Deep Monitoring Wells	OW-01	06/10/21	--	4.4	ND(0.2)	ND(8)	ND(10)	--	1.9	ND(5)	--	ND(0.25)	--	--	7J/ND(10)U*
Deep Monitoring Wells	OW-01	09/29/21	--	4.1	--	--	--	--	2.3	ND(5)	--	--	--	--	14
Deep Monitoring Wells	OW-01	12/08/21	--	4.1 J	--	--	--	--	2.3	ND(5)	--	--	30	--	15 JB
Deep Monitoring Wells	OW-10	12/11/20	--	18.6	ND(0.2)	ND(100)	ND(6)	--	9.81	ND(5)	--	ND(1)	44.4	--	ND(20)
Deep Monitoring Wells	OW-10	03/12/21	10000	69	ND(0.2)	ND(8)	4.7 J+	950 J	9.4	ND(5)	550000	ND(0.5)	--	--	8.6J/ND(10)U*
Deep Monitoring Wells	OW-10	03/12/21	9800	63	ND(0.2)	ND(8)	5.9 J	1000	8.5	ND(5)	530000	ND(0.5)	--	--	9.7J/ND(10)U*
Deep Monitoring Wells	OW-10	06/10/21	--	20	ND(0.2)	6.3 J	ND(10)	--	9.4	ND(5)	--	ND(0.25)	--	--	9.4J/ND(10)U*
Deep Monitoring Wells	OW-10	09/23/21	--	21	--	--	--	--	8.4	ND(5)	--	--	--	--	42 JB
Deep Monitoring Wells	OW-10	12/08/21	--	110	--	--	--	--	8.3	ND(5)	--	--	45	--	11 JB
Deep Monitoring Wells	OW-11	09/18/17	1300	19	--	--	--	1800	4.2	ND(5)	640000	--	--	--	87
Deep Monitoring Wells	OW-11	09/18/18	1200	18	--	--	--	1700	2.5	ND(5)	630000	--	210	--	9.8
Deep Monitoring Wells	OW-11	08/20/19	1200	17	--	170	ND(10)	1600	4.7	ND(5)	600000	ND(0.5)	200	--	3.9
Deep Monitoring Wells	OW-11	09/20/20	1400	18	--	200	ND(10)	1700	ND(1)	ND(5)	630000	ND(0.5)	200	--	21 J
Deep Monitoring Wells	OW-11	09/30/21	--	22	--	--	--	--	0.5 J	--	--	--	--	--	9.8J/ND(10)U*
Deep Monitoring Wells	OW-12	09/19/17	ND(1000)	2.6	--	--	--	850	ND(5)	ND(5)	270000	--	--	--	35
Deep Monitoring Wells	OW-12	09/19/18	--	4	--	--	--	--	ND(1)	ND(5)	--	--	12	--	8.1
Deep Monitoring Wells	OW-12	09/17/20	--	2.3	--	8.4	ND(10)	--	ND(1)	ND(5)	--	ND(0.5)	11	--	11
Deep Monitoring Wells	OW-12	09/30/21	--	3.1	--	--	--	--	ND(1)	--	--	--	--	--	8.1J/ND(10)U*
Deep Monitoring Wells	OW-13	12/09/20	--	26.1	ND(0.2)	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	15.2	--	ND(20)
Deep Monitoring Wells	OW-13	03/02/21	--	27	ND(0.2)	11	ND(10) UJ	--	ND(1)	ND(5)	--	ND(0.5)	--	--	8J/ND(10)U*
Deep Monitoring Wells	OW-13	06/09/21	--	16	ND(0.2)	ND(8)	ND(10) UJ	--	0.37 J	ND(5)	--	ND(0.25)	--	--	8.6J/ND(10)U*
Deep Monitoring Wells	OW-13	09/24/21	--	25	--	--	--	--	ND(1)	ND(5)	--	--	--	--	17 JB
Deep Monitoring Wells	OW-13	12/07/21	--	22	--	--	--	--	ND(1)	ND(5)	--	--	16	--	13 JB
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	760	--	--	--	--	1.5	ND(5)	--	--	36	--	160 J
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	1800	--	--	--	--	ND(1)	ND(5)	--	--	--	--	38 JB
Eastern Boundary Wells	OW-14	12/30/21	--	2000	--	--	--	--	ND(5)	ND(5)	--	--	1.4 J	--	7.9J/ND(10)U*
Eastern Boundary Wells	OW-29	12/09/20	--	342	ND(0.2)	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	47.8	--	43.2 J
Eastern Boundary Wells	OW-29	03/02/21	--	380	ND(0.2)	ND(8)	26 J-	--	ND(1)	ND(5)	--	ND(0.5)	--	--	7.6J/ND(10)U*
Eastern Boundary Wells	OW-29	06/09/21	--	160	ND(0.2)	ND(8)	19 J-	--	ND(1)	2.2 J	--	ND(0.25)	--	--	8.7J/ND(10)U*
Eastern Boundary Wells	OW-29	09/24/21	--	340	--	--	--	--	ND(1)	ND(5)	--	--	--	--	76 J
Eastern Boundary Wells	OW-29	12/07/21	--	360	--	--	--	--	ND(1)	ND(5)	--	--	47	--	12 JB
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	180	--	--	--	--	0.51 J	ND(5)	--	--	--	--	48 JB
Eastern Boundary Wells	OW-30	12/30/21	--	190	--	--	--	--	ND(5)	ND(5)	--	--	26	--	12 JB
Eastern Boundary Wells	OW-50	09/11/17	4600	110	--	--	--	400	2.6	ND(5)	240000	--	12	--	79
Eastern Boundary Wells	OW-50	12/09/20	--	120	ND(0.2)	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	12.1	--	ND(20)
Eastern Boundary Wells	OW-50	03/02/21	4600	120	ND(0.2)	ND(8)	ND(10) UJ	540 J	ND(1)	ND(5)	250000	ND(0.5)	--	--	ND(10)
Eastern Boundary Wells	OW-50	06/09/21	--	120	ND(0.2)	ND(8)	ND(10) UJ	--	ND(1)	1.3 J	--	ND(0.25)	--	--	7.8J/ND(10)U*
Eastern Boundary Wells	OW-50	09/24/21	--	120	--	--	--	--	ND(1)	ND(5)	--	--	--	--	91 J
Eastern Boundary Wells	OW-50	12/07/21	--	110	--	--	--	--	ND(1)	ND(5)	--	--	13	--	18 JB
Eastern Boundary Wells	OW-52	12/09/20	--	29.9	ND(0.2)	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	10.6	--	ND(20)
Eastern Boundary Wells	OW-52	03/02/21	620 J	31	ND(0.2)	ND(8)	ND(10) UJ	1400	ND(1)	ND(5)	250000	ND(0.5)	--	--	12 JB
Eastern Boundary Wells	OW-52	06/09/21	--	15	ND(0.2)	6.1 J	ND(10) UJ	--	0.4 J	ND(5)	--	ND(0.25)	--	--	8.5J/ND(10)U*
Eastern Boundary Wells	OW-52	09/24/21	--	27	--	--	--	--	ND(1)	ND(5)	--	--	--	--	50 JB
Eastern Boundary Wells	OW-52	12/07/21	--	29	--	--	--	--	ND(1)	ND(5)	--	--	11	--	14 JB
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	1400	--	--	--	--	ND(1)	ND(5)	--	--	--	--	26 JB
Eastern Boundary Wells	OW-54	12/29/21	--	1400	--	--	--	--	ND(10)	ND(5)	--	--	51	--	270
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	3100	--	--	--	--	ND(1)	ND(5)	--	--	--	--	120 J
Eastern Boundary Wells	OW-55	12/29/21	--	3200	--	--	--	--	ND(10)	ND(5)	--	--	4.4 J	--	16 JB
Eastern Boundary Wells	OW-56	12/23/20	--	431	ND(0.2)	ND(100)	86.1	--	ND(5)	ND(5)	--	ND(1)	14.2	--	ND(20)
Eastern Boundary Wells	OW-56	03/10/21	--	1500	ND(0.2)	6.9 J	86	--	ND(1)	1.4 J	--	ND(0.5)	--	--	16/ND(16)U*
Eastern Boundary Wells	OW-56	06/22/21	--	840	ND(0.2)	ND(8)	69	--	ND(5)	ND(5)	--	ND(1.2)	--	--	10/ND(10)U*
Eastern Boundary Wells	OW-56	09/24/21	--	270	--	--	--	--	1.2	ND(5)	--	--	--	--	13 JB
Eastern Boundary Wells	OW-56	12/23/21	--	170	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	14	--	120
Eastern Boundary Wells	OW-66	09/17/21	--	2400	ND(0.2)	--	350	--	ND(10)	ND(5)	--	--	--	2.3 J	ND(10)
Eastern Boundary Wells	OW-66	12/07/21	--	2400	--	--	--	--	ND(1)	ND(5)	--	--	1.8	--	12 JB
Eastern Boundary Wells	OW-70	09/17/21	3900	190	--	--	42	2300	ND(1)	ND(5)	270000	--	--	--	11
Eastern Boundary Wells	OW-70	12/22/21	--	320	--	--	--	--	ND(1)	ND(5)	--	--	6.8	--	16 JB
Evaporation Ponds	EP-2	11/21/19	25000	150	--	62	15	42000	6.3	2.2	650000	ND(2.5)	0.65	--	64
Evaporation Ponds	EP-2	09/16/20	88000	110	--	ND(8)	51 J-	200000	ND(5)	2.8 J	2200000	ND(2.5)	0.73 J	--	13
Evaporation Ponds	EP-2	09/17/20	ND(1000)	0.8 J	--	ND(8)	ND(10)	ND(1000)	ND(1)	ND(25)	500 J	ND(0.5)	ND(0.5)	--	590 J
Evaporation Ponds	EP-2	12/21/20	--	312 J	ND(0.2)	ND(100)	--	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-2	06/21/21	--	380	ND(0.2)	ND(8)	76	--	ND(20)	1.9 J	--	ND(5)	--	--	21 JB

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
Cleanup Levels			19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Evaporation Ponds	EP-2	12/15/21	--	--	7	180	--	--	ND(2)	--	ND(6)	--	2 J	290	ND(2.5)
Evaporation Ponds	EP-3	11/20/19	130	ND(5)	5.7	150	ND(20)	450	ND(20)	97000	ND(60)	ND(60)	ND(60)	6800	ND(2.5)
Evaporation Ponds	EP-3	09/16/20	650 J+	ND(5)	6.5	210	ND(2)	460	ND(2)	170000	3.4 J	ND(6)	ND(6) UJ	2500	0.5 J
Evaporation Ponds	EP-3	12/21/20	280	ND(2)	10	154	ND(3)	738	ND(5)	--	ND(10)	ND(10)	ND(20)	2250	ND(1)
Evaporation Ponds	EP-3	06/21/21	ND(200)	ND(20)	56	370	ND(20)	4500	ND(20)	--	ND(60)	29 J	ND(60)	2700	ND(25)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	74	ND(5)	6.4	240	0.37	450	ND(2)	260000	1.7	ND(6)	1.5	310	ND(2.5)
Evaporation Ponds	EP-4	09/17/20	ND(20) UJ	ND(50)	30 J	250	ND(2)	1200	ND(2)	660000	6.3	ND(6)	4.5 J	74	ND(25)
Evaporation Ponds	EP-4	12/21/20	ND(200)	ND(2)	20.7	206	ND(3)	1020	ND(5)	--	ND(10)	ND(10)	ND(20)	632	ND(1)
Evaporation Ponds	EP-4	06/21/21	ND(200)	ND(20)	78	300	ND(20)	3900	ND(20)	--	ND(60)	ND(60)	ND(60)	410	ND(25)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	51	ND(5)	11	190	0.32	470	ND(2)	330000	ND(6)	ND(6)	ND(6)	93	ND(2.5)
Evaporation Ponds	EP-5	09/17/20	ND(20) UJ	ND(50)	21 J	230	ND(2)	1000	ND(2)	570000	3 J	ND(6)	ND(6)	130	ND(25)
Evaporation Ponds	EP-5	12/21/20	ND(200)	2.17	22.9	194	ND(3)	1030	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Evaporation Ponds	EP-5	06/21/21	ND(100)	ND(20)	48	210	ND(10)	2600	ND(10)	--	ND(30)	26 J	ND(30)	85 J	ND(10)
Evaporation Ponds	EP-5	12/15/21	--	--	220	220	--	--	ND(40)	--	ND(120)	--	ND(50)	1500	ND(25)
Evaporation Ponds	EP-6	04/29/19	29	ND(5)	13	200	0.57	480	ND(2)	370000	ND(6)	ND(6)	ND(6)	97	ND(2.5)
Evaporation Ponds	EP-6	09/17/20	ND(20) UJ	ND(50)	19 J	210	ND(2)	920	ND(2)	510000	4.6 J	ND(6)	ND(6)	19 J	ND(25)
Evaporation Ponds	EP-6	12/21/20	ND(200)	2.15	28.8	263	ND(3)	1090	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Evaporation Ponds	EP-6	06/21/21	ND(100)	ND(20)	36	130	ND(10)	1600	ND(10)	--	ND(30)	18 J	ND(30)	ND(100)	ND(10)
Evaporation Ponds	EP-6	12/15/21	--	--	43	170	--	--	ND(10)	--	ND(30)	--	ND(20)	300	ND(10)
Evaporation Ponds	EP-7	11/20/19	ND(1000)	ND(100)	340	190	ND(100)	11000	ND(100)	520000	ND(300)	ND(300)	110	ND(1000)	ND(50)
Evaporation Ponds	EP-7	09/17/20	400 J-	ND(500)	330 J	160	ND(10)	11000	ND(10) UJ	430000	23 J	ND(30)	ND(30)	180	ND(250)
Evaporation Ponds	EP-7	12/21/20	ND(200)	ND(20)	443	250	ND(3)	11800	ND(50)	--	ND(100)	ND(100)	82.1	ND(200)	ND(10)
Evaporation Ponds	EP-7	06/21/21	ND(400)	35 J	940	ND(40)	ND(40)	29000	ND(40)	--	ND(120)	68 J	ND(120)	ND(100)	ND(250)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	ND(1000)	ND(100)	320	220	ND(100)	9000	ND(100)	690000	ND(300)	ND(300)	150	ND(1000)	ND(50)
Evaporation Ponds	EP-8	09/17/20	32 J-	ND(50)	310	230	ND(10)	8900	ND(10) UJ	570000	16 J	ND(30)	ND(30)	55 J	2.9 J
Evaporation Ponds	EP-8	12/22/20	ND(2000)	20.2	564	ND(100)	ND(3)	16100	ND(50)	--	ND(100)	ND(100)	51.7	ND(2000)	ND(10)
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	--	1600	ND(100)	--	--	ND(100)	--	ND(300)	--	ND(100)	ND(400)	ND(50)
Evaporation Ponds	EP-9	11/20/19	ND(1000)	ND(50)	110	160	ND(100)	3000	ND(100)	1200000	ND(300)	ND(300)	130	ND(1000)	ND(25)
Evaporation Ponds	EP-9	09/17/20	ND(2000) UJ	ND(50)	30 J	290	ND(200)	7100	ND(200) UJ	840000	ND(600)	ND(600)	ND(600)	ND(2000)	2.8 J
Evaporation Ponds	EP-9	12/21/20	ND(200)	ND(3)	364	361	ND(3)	9300	ND(50)	--	ND(100)	ND(100)	38.8	ND(200)	ND(10)
Evaporation Ponds	EP-9	06/21/21	ND(1000)	ND(100)	1300	ND(100)	ND(100)	30000	ND(100)	--	ND(300)	130 J	ND(300)	ND(100)	ND(250)
Evaporation Ponds	EP-9	12/15/21	--	--	1600	ND(100)	--	--	ND(100)	--	ND(300)	--	ND(100)	ND(400)	ND(50)
Evaporation Ponds	EP-11	09/07/18	--	--	860	27	--	--	ND(10)	200000	47	--	ND(30)	90	ND(100)
Evaporation Ponds	EP-11	04/29/19	ND(100)	20	110	190	1.7	3900	ND(10)	760000	ND(30)	ND(30)	20	ND(100)	ND(25)
Evaporation Ponds	EP-11	12/22/20	ND(2000)	ND(20)	580 J	ND(100)	ND(3)	18800	ND(50)	--	112	ND(100)	ND(20)	ND(2000)	ND(10)
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	--	49	84	--	--	ND(2)	740000	8.7	--	6.2	750	ND(10)
Evaporation Ponds	EP-12A	11/21/19	100	ND(5)	11	120	0.61	710	ND(2)	110000	10	ND(6)	3	4900	ND(2.5)
Evaporation Ponds	EP-12A	12/22/20	8260	ND(10)	19.4	162	ND(3)	1410	ND(5)	--	18	11.7	ND(20)	6790	ND(5)
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	160	ND(5)	6.6	140	0.57	510	ND(2)	99000	12	ND(6)	2.9	7000	ND(2.5)
Evaporation Ponds	EP-12B	09/18/20	41 J+	5.2	19	260	1.1 J	900	ND(2) UJ	1000000	6.2	ND(6) UJ	ND(6)	220	0.22 J
Evaporation Ponds	EP-12B	12/22/20	ND(400)	ND(10)	15.9	202	ND(3)	920	ND(5)	--	10.7	ND(10)	ND(20)	828	ND(5)
Evaporation Ponds	EP-12B	06/21/21	ND(100)	ND(20)	44 J	300	ND(10)	3100	ND(10)	--	ND(30)	36	ND(30)	610	ND(25)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	623	ND(20)	ND(10)	88.1	ND(3)	239	ND(5)	--	ND(10)	ND(10)	ND(20)	1240	ND(10)
Evaporation Ponds	STP-1 to EP-2	03/10/21	170	1.3	2.8	43	ND(2) UJ	230	ND(2)	--	ND(6)	3.8 J	5.2 J	450	0.043 J
Evaporation Ponds	STP-1 to EP-2	06/29/21	ND(20)	ND(5)	3.9 J	12	ND(2)	200	ND(2)	--	ND(6)	4.1 J	ND(6)	63	ND(0.5)
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	--	4	11	--	--	ND(2)	--	ND(6)	--	7.8	31	0.12 J
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	--	2.9	28	--	--	ND(2)	--	ND(6)	--	1.5	74	0.1 J
Land Treatment Unit Wells	MW-1	09/20/17	--	--	1.3	13	--	--	ND(2)	1700	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-1	09/13/18	--	ND(1)	1.3	12	ND(2)	--	ND(2)	1700	2.4	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-1	08/12/19	10	ND(1)	1.2	12	ND(2)	750	ND(2)	1800	2.1	ND(6)	0.099	ND(20)	
Land Treatment Unit Wells	MW-1	09/22/20	11 J	ND(1) UJ	1.5	12	ND(2)	740	ND(2)	1600	ND(6)	ND(6)	ND(6)	ND(20)	0.082 J
Land Treatment Unit Wells	MW-1	09/29/21	--	--	2	11	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	0.11 J
Land Treatment Unit Wells	MW-2	09/20/17	--	--	1.1	18	--	--	ND(2)	1500	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-2	09/13/18	--	ND(1)	0.98	18	ND(2)	--	ND(2)	1600	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-2	08/13/19	2.7	ND(1)	1.1	17	ND(2)	780	ND(2)	1500	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-2	09/18/20	ND(20)	ND(1)	1	17	ND(2)	730	ND(2) UJ	1600	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-2	09/17/21	--	--	ND(20)	18	--	--	ND(2)	--	ND(6)	--	270	ND(20)	ND(10)
Land Treatment Unit Wells	MW-4	09/21/17	--	--	0.87	20	--	--	ND(2)	1900	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-4	09/13/18	--	ND(1)	0.72	21	ND(2)	--	ND(2)	1900	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-4	08/13/19	5.6	ND(1)	0.78	21	ND(2)	380	ND(2)	1800	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-4	09/18/20	7.3 J+	ND(1)	0.75 J	19	ND(2)	360	ND(2) UJ	1900	2.2 J	ND(6) UJ	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-4	09/17/21	--	--	ND(20)	19	--	--	ND(2)	--	ND(6)	--	ND(20)	ND(20)	ND(10)

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (µg/L)	Mercury, Dissolved (µg/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
Cleanup Levels			NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Evaporation Ponds	EP-2	12/15/21	--	300	--	--	--	--	ND(5) UJ	ND(5)	--	--	1.1 J	--	14 JB
Evaporation Ponds	EP-3	11/20/19	34000	350	--	ND(80)	42	210000	6.1	ND(50)	860000	ND(2.5)	2.1	--	55
Evaporation Ponds	EP-3	09/16/20	94000	160	--	ND(8)	56 J-	210000	ND(5)	3.2 J	2200000	ND(2.5)	1 J	--	32
Evaporation Ponds	EP-3	12/21/20	--	286	ND(0.4)	ND(100)	129	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-3	06/21/21	--	1100	ND(0.2)	62 J	490	--	19 J	ND(50)	--	ND(12)	--	--	ND(100)
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	69000	340	--	ND(8)	11	230000	12	4.6	1300000	ND(2.5)	1.8	--	19
Evaporation Ponds	EP-4	09/17/20	260000	1300	--	ND(8) UJ	48 J+	680000	ND(50)	10	5500000	ND(25)	ND(25)	--	6.5J/ND(10)U*
Evaporation Ponds	EP-4	12/21/20	--	724	ND(0.4)	ND(100)	99.6	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-4	06/21/21	--	1700	ND(0.2)	ND(80)	240	--	8.1 J	ND(50)	--	ND(12)	--	--	ND(100)
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	110000	450	--	ND(8)	12	300000	5.7	5.5	2300000	0.41	1.9	--	16
Evaporation Ponds	EP-5	09/17/20	210000	900	--	ND(8)	46 J+	560000	ND(50)	8.4	4400000	ND(25)	ND(25)	--	6.5J/ND(10)U*
Evaporation Ponds	EP-5	12/21/20	--	980	ND(0.4)	ND(100)	62.8	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-5	06/21/21	--	2100	ND(0.2)	ND(40)	98	--	ND(20)	7.4 J	--	ND(5)	--	--	ND(50)
Evaporation Ponds	EP-5	12/15/21	--	9100	--	--	--	--	18 J-	ND(100)	--	--	ND(25)	--	ND(200)
Evaporation Ponds	EP-6	04/29/19	120000	460	--	ND(8)	11	320000	5	7.1	2300000	ND(2.5)	1.9	--	16
Evaporation Ponds	EP-6	09/17/20	190000	700	--	ND(8) UJ	41	490000	ND(50)	8.5	4300000 J-	ND(25)	ND(25)	--	ND(10)
Evaporation Ponds	EP-6	12/21/20	--	1020	ND(0.2)	ND(100)	55.9	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Evaporation Ponds	EP-6	06/21/21	--	240	ND(0.2)	ND(40)	50	--	ND(20)	ND(25)	--	ND(5)	--	--	ND(50)
Evaporation Ponds	EP-6	12/15/21	--	2400	--	--	--	--	ND(20) UJ	ND(25)	--	--	ND(10)	--	24J/ND(50)U*
Evaporation Ponds	EP-7	11/20/19	3800000	1300	--	ND(400)	250	4900000	40	ND(250)	91000000	ND(50)	9.4	--	ND(500)
Evaporation Ponds	EP-7	09/17/20	4100000	4000	--	ND(40) UJ	330 J+	5800000	ND(500)	13 J	120000000	ND(250)	ND(250)	--	ND(50)
Evaporation Ponds	EP-7	12/21/20	--	3530	ND(0.2)	ND(1000)	409	--	ND(50)	ND(50)	--	ND(10)	ND(50)	--	ND(20)
Evaporation Ponds	EP-7	06/21/21	--	7400	ND(0.2)	120 J	660	--	87 J	ND(100)	--	ND(120)	--	--	ND(200)
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	3200000	4300	--	ND(400)	230	4000000	54	ND(250)	80000000	ND(50)	ND(50)	--	ND(500)
Evaporation Ponds	EP-8	09/17/20	3100000	3200	--	ND(40) UJ	250	4200000	ND(50)	16 J	85000000 J-	ND(25)	6.3 J	--	ND(50)
Evaporation Ponds	EP-8	12/22/20	--	3610	ND(0.2)	ND(1000)	631	--	ND(50)	ND(50)	--	ND(10)	ND(50)	--	ND(20)
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/28/21	--	16000	--	--	--	--	ND(100)	ND(250)	--	--	30J*/ND(50)U*	--	ND(500)
Evaporation Ponds	EP-9	11/20/19	1300000	1900	--	ND(400)	ND(500)	1500000	42	ND(250)	33000000	ND(25)	ND(50)	--	ND(500)
Evaporation Ponds	EP-9	09/17/20	3200000	3600	--	ND(800)	ND(1000)	3600000	ND(50)	ND(500)	85000000 J-	ND(25)	ND(25)	--	ND(1000)
Evaporation Ponds	EP-9	12/21/20	--	3570	ND(0.2)	ND(1000)	243	--	ND(50)	ND(50)	--	ND(10)	ND(50)	--	ND(20)
Evaporation Ponds	EP-9	06/21/21	--	9700	ND(0.2)	ND(400)	510	--	47 J	ND(250)	--	ND(120)	--	--	ND(500)
Evaporation Ponds	EP-9	12/15/21	--	15000	--	--	--	--	ND(100)	ND(250)	--	--	24 J	--	350J/ND(500)U*
Evaporation Ponds	EP-11	09/07/18	9200000	12000	--	--	--	7800000	ND(100)	14	91000000	--	ND(100)	--	21
Evaporation Ponds	EP-11	04/29/19	1200000	410	--	ND(40)	130	1700000	11	18	36000000	ND(25)	5.9	--	32
Evaporation Ponds	EP-11	12/22/20	--	8500	ND(0.2)	ND(1000)	669	--	ND(500)	ND(50)	--	ND(10)	ND(50)	--	20
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	820000	1600	--	--	--	1700000	21	17	15000000	--	15	--	6.4
Evaporation Ponds	EP-12A	11/21/19	68000	570	--	13	86	380000	4.5	2.3	1500000	ND(2.5)	1.5	--	49
Evaporation Ponds	EP-12A	12/22/20	--	5270	ND(0.2)	ND(200)	211	--	ND(25)	ND(5)	--	ND(5)	ND(25)	--	51.4
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	41000	390	--	18	59	250000	5.4	1.4	890000	ND(2.5)	1.9	--	49
Evaporation Ponds	EP-12B	09/18/20	280000	1200	--	ND(8)	39 J	510000	4.3 J	27 J	5400000	ND(2.5)	1.6 J	--	19
Evaporation Ponds	EP-12B	12/22/20	--	1110	ND(0.2)	ND(200)	125	--	ND(25)	ND(5)	--	ND(5)	ND(25)	--	ND(20)
Evaporation Ponds	EP-12B	06/21/21	--	1300	ND(0.2)	ND(40)	330	--	ND(50)	9.2 J	--	ND(12)	--	--	ND(50)
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	--	276	ND(0.4)	ND(100)	12.3 J	--	ND(50)	ND(5)	--	ND(10)	ND(50)	--	63.4
Evaporation Ponds	STP-1 to EP-2	03/10/21	--	330	ND(0.2)	ND(8)	7.6 J	--	0.8 J	3.9 J	--	ND(0.5)	--	--	37 JB
Evaporation Ponds	STP-1 to EP-2	06/29/21	--	60	ND(0.2)	ND(8)	ND(10)	--	ND(5)	1.6 J	--	ND(0.25)	--	--	18
Evaporation Ponds	STP-1 to EP-2	09/30/21	--	30	--	--	--	--	1.1	--	--	--	--	--	14 JB
Evaporation Ponds	STP-1 to EP-2	12/15/21	--	110	--	--	--	--	0.73 J	--	--	--	1.1	--	45 JB
Land Treatment Unit Wells	MW-1	09/20/17	ND(1000)	1.8	--	--	--	690	0.88	ND(0.5)	260000	--	--	--	11
Land Treatment Unit Wells	MW-1	09/13/18	ND(1000)	2	--	--	--	570	ND(1)	ND(5)	270000	--	9.5	2.2	6.9
Land Treatment Unit Wells	MW-1	08/12/19	190	1.7	--	7.6	ND(10)	590	ND(1)	ND(5)	260000	ND(0.5)	10	--	5.9
Land Treatment Unit Wells	MW-1	09/22/20	170 J	2 J	--	7.1 J	ND(10)	550 J	ND(1)	ND(5)	260000	ND(0.5)	9.7	--	8.1 J
Land Treatment Unit Wells	MW-1	09/29/21	--	1.4 J	--	--	--	--	ND(1)	--	--	--	--	--	20
Land Treatment Unit Wells	MW-2	09/20/17	ND(1000)	2.8	--	--	--	640	0.81	ND(0.5)	270000	--	--	--	ND(10)
Land Treatment Unit Wells	MW-2	09/13/18	ND(1000)	2.4	--	--	--	500	ND(1)	ND(5)	270000	--	8	ND(50)	7.9
Land Treatment Unit Wells	MW-2	08/13/19	150	1.8	--	9.1	ND(10)	610	ND(1)	ND(5)	280000	ND(0.5)	8.4	--	10
Land Treatment Unit Wells	MW-2	09/18/20	150 J	3.3/ND(3.3)U*	--	ND(8)	ND(10)	690 J	ND(1)	ND(5)	250000	ND(0.5)	7.7	--	19/ND(19)U*
Land Treatment Unit Wells	MW-2	09/17/21	--	1.8 J	ND(0.2)	--	--	--	ND(20)	--	--	--	--	--	230 J
Land Treatment Unit Wells	MW-4	09/21/17	ND(1000)	5.2	--	--	--	740	0.88	ND(0.5)	280000	--	--	--	11
Land Treatment Unit Wells	MW-4	09/13/18	ND(1000)	6.4	--	--	--	590	ND(1)	ND(5)	300000	--	14	ND(50)	11
Land Treatment Unit Wells	MW-4	08/13/19	200	5.2	--	9.7	ND(10)	750	ND(1)	ND(5)	310000	ND(0.5)	14	--	6.6
Land Treatment Unit Wells	MW-4	09/18/20	200 J	4	--	6.6 J	ND(10)	720 J	ND(1)	ND(25)	--	ND(0.5)	20 J	--	6.9 J
Land Treatment Unit Wells	MW-4	09/17/21	--	3.5	ND(0.2)	--	--	--	ND(20)	--	--	--	--	--	ND(10)

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
Cleanup Levels			19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Land Treatment Unit Wells	MW-5	09/11/17	--	--	1.2	17	--	--	ND(2)	1500	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-5	09/17/18	--	ND(1)	0.93	17	ND(2)	--	ND(2)	1400	ND(6)	--	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-5	08/14/19	3.3	ND(1)	0.98	16	ND(2)	750	ND(2)	1400	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-5	09/21/20	ND(20)	ND(1)	0.91 J	17	ND(2)	730	ND(2)	1600	ND(6)	ND(6) UJ	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	MW-5	09/29/21	--	--	1.1	15	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Land Treatment Unit Wells	OW-67	09/17/21	--	ND(10)	2.3 J	74	ND(2)	--	ND(2)	--	ND(6)	11	--	15 J	ND(5)
Land Treatment Unit Wells	OW-67	12/23/21	--	--	2.7 J	62	--	--	ND(10)	--	ND(30)	--	2.2 J	23	ND(2.5)
Land Treatment Unit Wells	OW-68	09/17/21	--	ND(10)	5.5 J	85	ND(2)	--	ND(2)	--	ND(6)	79	--	950	1.2 J
Land Treatment Unit Wells	OW-68	12/23/21	--	--	16	66	--	--	ND(2)	--	ND(6)	--	3.3 J	5300	6.6
Land Treatment Unit Wells	SMW-2	09/11/17	--	--	9.8	16	--	--	ND(2)	340000	1.4	--	ND(6)	54	ND(2.5)
Land Treatment Unit Wells	SMW-2	09/18/18	--	--	4.1	14	--	--	ND(2)	320000	ND(6)	--	ND(6)	31	ND(2.5)
Land Treatment Unit Wells	SMW-2	08/22/19	ND(20)	ND(5)	2.6	14	0.42	1400	ND(2)	320000	ND(6)	ND(6)	3.7	26	ND(2.5)
Land Treatment Unit Wells	SMW-2	09/19/20	ND(20)	ND(5)	2.4 J	15	ND(2)	1300	ND(2) UJ	300000	ND(6)	ND(6)	ND(6)	20	ND(2.5)
Land Treatment Unit Wells	SMW-2	09/30/21	--	--	1.9 J	17	--	--	ND(2)	--	ND(6)	--	ND(5)	22	ND(2.5)
Land Treatment Unit Wells	SMW-4	09/11/17	--	--	3.2	23	--	--	ND(2)	4400	4.3	--	ND(6)	120	0.59
Land Treatment Unit Wells	SMW-4	09/12/18	--	ND(1)	2.9	19	ND(2)	--	ND(2)	3700	4.2	--	ND(6)	79	ND(0.5)
Land Treatment Unit Wells	SMW-4	08/13/19	11	ND(1)	3.1	17	ND(2)	1700	ND(2)	3500	2.6	6.6	ND(6)	ND(20)	ND(0.5)
Land Treatment Unit Wells	SMW-4	09/20/20	43	ND(1)	2.9	14	ND(2)	1700	ND(2)	3100	ND(6)	77	ND(6)	17 J	0.038 J
Land Treatment Unit Wells	SMW-4	09/29/21	--	--	3.4	14	--	--	ND(2)	--	ND(6)	--	ND(1)	21	ND(0.5)
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	--	ND(10)	6.6 J	4700	ND(2)	--	ND(2)	--	ND(6)	8	--	4500	ND(5)
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	--	5.8	5500	--	--	ND(2) UJ	--	ND(6)	--	ND(1)	8200	0.059 J
Marketing Tank Farm Wells	MKTF-02	12/18/20	ND(200) UJ	ND(20)	ND(10)	765	ND(3)	855	ND(5)	--	ND(10)	ND(10)	ND(20)	1030	ND(10)
Marketing Tank Farm Wells	MKTF-02	03/10/21	ND(20)	ND(5)	1.1 J	440	ND(2) UJ	770	ND(2)	730000	ND(6)	7.5 J+	ND(6)	1800	ND(2.5)
Marketing Tank Farm Wells	MKTF-02	06/17/21	ND(20)	ND(5)	0.88 J	370	ND(2)	790	ND(2)	--	ND(6)	8	ND(6)	1000	ND(2.5)
Marketing Tank Farm Wells	MKTF-02R	09/17/21	--	ND(10)	ND(10)	48	ND(2)	--	ND(2)	--	ND(6)	5 J	--	ND(20)	ND(5)
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	2.3 J	59	--	--	ND(2)	--	ND(6)	--	ND(5)	29	ND(2.5)
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	--	ND(10)	3.6 J	1200	ND(2)	--	ND(2)	--	ND(6)	4.3 J	--	1500	ND(5)
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	1.9	550	--	--	ND(2) UJ	--	ND(6)	--	0.63 J	490	ND(0.5)
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	ND(200) UJ	ND(2)	9.73	9090	ND(3)	443	ND(5)	--	ND(10)	ND(10)	ND(20)	7250	ND(1)
Marketing Tank Farm Wells	MKTF-10	03/10/21	ND(20)	ND(1)	4.2 J	10000	ND(2) UJ	410	ND(2)	300000	ND(6)	3.9 J+	ND(6)	9300	ND(0.5)
Marketing Tank Farm Wells	MKTF-10	06/23/21	ND(20)	ND(1)	11	9700	ND(2)	490	ND(2)	--	ND(6)	ND(6)	ND(6)	9700 J	ND(2.5)
Marketing Tank Farm Wells	MKTF-10	09/15/21	ND(20)	ND(1)	8.9	9000	ND(2)	550	ND(2)	--	ND(6)	3.2 J	ND(1)	8000	ND(0.5)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	5.4	8900	--	--	ND(2)	--	ND(6)	--	ND(1)	7700	ND(0.5)
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	6.2 J	ND(5)	8.7	3000	ND(2) UJ	590	ND(2)	300000	ND(6)	11 J+	ND(6)	6300	ND(2.5)
Marketing Tank Farm Wells	MKTF-11	06/17/21	ND(20)	ND(5)	7.5	4800	ND(2)	580	ND(2)	--	ND(6)	8	ND(6)	4800	ND(2.5)
Marketing Tank Farm Wells	MKTF-11	09/15/21	ND(20)	1	8.8	5100	ND(2)	630	ND(2)	--	ND(6)	5.2 J	ND(1)	3900	ND(0.5)
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	--	11	4300	--	--	ND(2)	--	ND(6)	--	ND(5)	3100	ND(2.5)
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/28/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	--	3.5	830	--	--	ND(2)	--	ND(6)	--	ND(1)	3100	0.17 J
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	--	0.91 J	160	--	--	ND(2)	--	ND(6)	--	6.4	39	0.065 J
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	--	ND(10)	4.6 J	230	ND(2)	--	ND(2)	--	ND(6)	2.8 J	--	160	ND(5)
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	--	4.7	340	--	--	ND(2)	--	ND(6)	--	0.44 J	160	0.12 J
Marketing Tank Farm Wells	MKTF-18	12/16/20	ND(200)	ND(2)	1.72	2180	ND(3)	404	ND(5)	--	ND(10)	ND(10)	ND(20)	239	ND(1)
Marketing Tank Farm Wells	MKTF-18	03/11/21	ND(20)	ND(1)	1.1	2400	ND(2)	380	ND(2)	110000	ND(6)	ND(6)	ND(6)	240	0.09 J
Marketing Tank Farm Wells	MKTF-18	06/23/21	ND(20)	ND(1)	1.1	2300	ND(2)	360	ND(2)	--	ND(6)	ND(6)	ND(6)	1500 J	ND(0.5)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	--	ND(10)	7.1 J	1600	ND(2)	--	ND(2)	--	ND(6)	8.8	--	1500 J	ND(5)
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	--	6.2	1600	--	--	ND(2)	--	ND(6)	--	ND(1)	2100	ND(0.5)
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (µg/L)	Mercury, Dissolved (µg/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
Cleanup Levels			NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Land Treatment Unit Wells	MW-5	09/11/17	ND(1000)	4.2	--	--	--	540	1.2	ND(5)	260000	--	9.5	--	29
Land Treatment Unit Wells	MW-5	09/17/18	ND(1000)	3.9	--	--	--	600	ND(1)	ND(5)	260000	--	7.5	ND(50)	11
Land Treatment Unit Wells	MW-5	08/14/19	140	3.7	--	8.3	ND(10)	610	ND(1)	ND(5)	290000	ND(0.5)	7.8	--	6
Land Treatment Unit Wells	MW-5	09/21/20	150 J	3.5	--	8.1	ND(10)	510 J	ND(1)	ND(5)	260000	ND(0.5)	7.7	--	21 J
Land Treatment Unit Wells	MW-5	09/29/21	--	3.3	--	--	--	--	ND(1)	--	--	--	--	--	8 J
Land Treatment Unit Wells	OW-67	09/17/21	--	7400	ND(0.2)	--	98	--	ND(10)	3.9 J	--	--	--	ND(50)	16 JB
Land Treatment Unit Wells	OW-67	12/23/21	--	9100	ND(0.2)	--	--	--	ND(5)	--	--	--	78	--	ND(50)
Land Treatment Unit Wells	OW-68	09/17/21	--	9600	ND(0.2)	--	150	--	5.8 J	2.9 J	--	--	--	2.3 J	39 JB
Land Treatment Unit Wells	OW-68	12/23/21	--	6400	ND(0.2)	--	--	--	2.7 J	--	--	--	9.9	--	17 JB
Land Treatment Unit Wells	SMW-2	09/11/17	96000	310	--	--	--	980	24	ND(5)	2200000	--	120	--	33
Land Treatment Unit Wells	SMW-2	09/18/18	96000	330	--	--	--	740	ND(5)	7.9	2300000	--	99	--	6.5
Land Treatment Unit Wells	SMW-2	08/22/19	100000	360	--	ND(8)	39	720	ND(5)	4.8	2400000	ND(2.5)	110	--	ND(10)
Land Treatment Unit Wells	SMW-2	09/19/20	100000	400	--	ND(8)	42	810 J	ND(5)	4.1 J	2200000	ND(2.5)	88	--	12/ND(12)U*
Land Treatment Unit Wells	SMW-2	09/30/21	--	380	--	--	41	--	ND(5)	--	--	--	--	--	14 JB
Land Treatment Unit Wells	SMW-4	09/11/17	1100	10	--	--	--	500	ND(5)	ND(5)	300000	--	31	--	46
Land Treatment Unit Wells	SMW-4	09/12/18	990	4.2	--	--	--	620	ND(1)	ND(5)	300000	--	29	45	9.4
Land Treatment Unit Wells	SMW-4	08/13/19	810	0.56	--	12	ND(10)	480	ND(1)	ND(5)	300000	ND(0.5)	31	--	7.5
Land Treatment Unit Wells	SMW-4	09/20/20	670 J	1.4 J	--	9.3	ND(10)	500 J	ND(1)	ND(5)	280000	ND(0.5)	26	--	11
Land Treatment Unit Wells	SMW-4	09/29/21	--	0.73 J	--	--	ND(10)	--	ND(1)	--	--	--	--	--	14
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	--	3100	ND(0.2)	--	29	--	ND(10)	ND(5)	--	--	--	ND(50)	11 JB
Marketing Tank Farm Wells	MKTF-01R	12/22/21	--	3100	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	2	--	8.8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-02	12/18/20	--	6460	ND(0.2)	ND(100)	16.3	--	ND(50)	ND(5)	--	ND(10)	ND(50)	--	ND(20)
Marketing Tank Farm Wells	MKTF-02	03/10/21	120000	6800	ND(0.2)	ND(8)	15	3400	ND(5)	11	1400000	ND(2.5)	--	--	14/ND(14)U*
Marketing Tank Farm Wells	MKTF-02	06/17/21	--	5400	ND(0.2)	ND(8)	20	--	ND(5)	2.5 J	--	ND(1.2)	--	--	11 JB
Marketing Tank Farm Wells	MKTF-02R	09/17/21	--	87	ND(0.2)	--	ND(10)	--	ND(10)	ND(5)	--	--	--	2.2 J	34 JB
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	210	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	80	--	17/ND(17)U*
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	--	2400	ND(0.2)	--	6.6 J	--	ND(10)	ND(5)	--	--	--	ND(50)	11 JB
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	2500	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	21	--	75 JB
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	--	4810	ND(0.2)	ND(100)	14.9	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-10	03/10/21	68000	5300	ND(0.2)	ND(8)	17	600 J	ND(5)	3.9 J	410000	ND(0.5)	--	--	13/ND(13)U*
Marketing Tank Farm Wells	MKTF-10	06/23/21	--	5900	ND(0.2)	ND(8)	17 J-	--	ND(1)	1.5 J	--	ND(1.2)	--	--	6.8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-10	09/15/21	--	5000	ND(0.2)	ND(8)	17	--	ND(1)	ND(5)	--	ND(0.25)	--	--	9J/ND(10)U*
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	4600	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	0.44 J	--	10/ND(10)U*
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	79000	5600	ND(0.2)	34	30	1800	ND(5)	4.3 J	1100000	ND(2.5)	--	--	21 JB
Marketing Tank Farm Wells	MKTF-11	06/17/21	--	4900	ND(0.2)	16	29	--	ND(1)	ND(5)	--	ND(1.2)	--	--	8.3J/ND(10)U*
Marketing Tank Farm Wells	MKTF-11	09/15/21	--	4500	ND(0.2)	15	24	--	ND(1)	ND(5)	--	ND(0.25)	--	--	7J/ND(10)U*
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	5000	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	8.7	--	10/ND(10)U*
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/28/20	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	1100	ND(0.2)	--	--	--	0.62 J	ND(5)	--	--	--	--	8.2J/ND(10)U*
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	12	ND(0.2)	--	--	--	0.49 J	ND(5)	--	--	1.2 JB	--	29 JB
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	--	2800	ND(0.2)	--	ND(10)	--	ND(10)	ND(5)	--	--	--	ND(50)	9.6J/ND(10)U*
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	3400	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	4.7	--	7.8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-18	12/16/20	--	2200	ND(0.2) UJ	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-18	03/11/21	27000	2500	ND(0.2)	ND(8)	8.5 J	410 J	ND(1)	1.5 J	310000	ND(0.5)	--	--	15/ND(15)U*
Marketing Tank Farm Wells	MKTF-18	06/23/21	--	2400	ND(0.2)	ND(8)	4.1 J-	--	ND(1)	ND(5)	--	ND(0.25)	--	--	8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-18R	09/17/21	--	1700 J	ND(0.2)	--	4.8 J	--	ND(10)	ND(5)	--	--	--	ND(50)	9.3J/ND(10)U*
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	2400	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	3.6	--	15 JB
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
	Cleanup Levels		19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	ND(200) UJ	ND(2)	2.14	457	ND(3)	686	ND(5)	--	ND(10)	ND(10)	ND(20)	248	ND(1)
Marketing Tank Farm Wells	MKTF-24	03/09/21	ND(20)	ND(1)	1.9	640	ND(2) UJ	720	ND(2)	190000	ND(6)	12 J+	ND(6)	180	1.5
Marketing Tank Farm Wells	MKTF-24	06/16/21	9.5 J	ND(5)	2.2 J	620	ND(2)	700	ND(2)	--	ND(6)	11	ND(6)	300	1.4 J
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	2.7	710	--	--	ND(2)	--	ND(6)	--	ND(1)	390	1.3
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	3.2	830	--	--	ND(2)	--	ND(6)	--	ND(1)	640	1.1
Marketing Tank Farm Wells	MKTF-25	12/18/20	ND(200) UJ	ND(2)	1.46	293	ND(3)	726	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-25	03/05/21	ND(20)	ND(1)	1.1	260	ND(2)	710	ND(2) UJ	160000	ND(6)	ND(6)	9.5	140	0.046 J
Marketing Tank Farm Wells	MKTF-25	06/17/21	ND(20)	ND(5)	1.8	280	ND(2)	680	ND(2)	--	ND(6)	4.6 J	ND(6)	95	ND(2.5)
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	2.3	280	--	--	ND(2)	--	ND(6)	--	0.94 J	27	ND(0.5)
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	1.7	290	--	--	ND(2)	--	ND(6)	--	0.83 J	33	ND(0.5)
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	296 J	ND(20)	ND(10)	44.8	ND(3)	540	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(10)
Marketing Tank Farm Wells	MKTF-27	03/05/21	ND(20)	ND(5)	ND(5)	65	ND(2)	370	ND(2) UJ	300000	ND(6)	4.1 J	7.1	11 J	ND(2.5)
Marketing Tank Farm Wells	MKTF-27	06/16/21	ND(20)	ND(5)	0.64 J	46	ND(2)	470	ND(2)	--	ND(6)	4.8 J	4.1 J	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-27	09/15/21	ND(20)	ND(1)	0.52 J	67	ND(2)	590	ND(2)	--	ND(6)	3 J	2.7	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	ND(5)	80	--	--	ND(2)	--	ND(6)	--	2.7	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-28	12/18/20	ND(200) UJ	ND(2)	ND(1)	72.9	ND(3)	1700	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-28	03/05/21	160	ND(1)	ND(5)	62	ND(2)	1400	ND(2) UJ	58000	ND(6)	ND(6)	ND(6)	67	0.15 J
Marketing Tank Farm Wells	MKTF-28	06/16/21	270	ND(5)	0.93 J	59	ND(2)	1500	ND(2)	--	ND(6)	ND(6)	ND(6)	110	0.35 J
Marketing Tank Farm Wells	MKTF-28	09/15/21	ND(20)	ND(1)	1.3	110	ND(2)	2000	ND(2)	--	ND(6)	5.7 J	2.7	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	0.95 J	100	--	--	ND(2)	--	ND(6)	--	1.8	40	0.064 J
Marketing Tank Farm Wells	MKTF-29	12/15/20	ND(200) UJ	ND(2)	ND(1)	160	ND(3)	694	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-29	03/09/21	ND(20)	ND(1)	1 J	140	ND(2) UJ	580	ND(2)	430000	ND(6)	5.6 J+	ND(6)	ND(20)	0.067 J
Marketing Tank Farm Wells	MKTF-29	06/15/21	100 J	ND(5)	0.89 J	140	ND(2)	600	ND(2)	--	ND(6)	5.5 J	8.2	40 J	ND(2.5)
Marketing Tank Farm Wells	MKTF-29	09/15/21	ND(20)	ND(1)	0.83 J	170	ND(2)	690	ND(2)	--	ND(6)	6.2	6	ND(20)	0.098 J
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	0.77 J	230	--	--	ND(2)	--	ND(6)	--	2.4	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-30	12/15/20	12200 J	ND(2)	ND(1)	123 J	ND(3)	760	ND(5)	--	ND(10)	ND(10)	ND(20)	5620 J	2.48 J
Marketing Tank Farm Wells	MKTF-30	03/09/21	25	ND(1)	0.58 J	32	ND(2) UJ	720	ND(2)	86000	ND(6)	2.9 J+	ND(6)	12 J	0.1 J
Marketing Tank Farm Wells	MKTF-30	06/15/21	ND(20)	ND(5)	0.68 J	34	ND(2)	740	ND(2)	--	ND(6)	2.6 J	ND(6)	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-30	09/15/21	ND(20)	0.47 J	0.5 J	37	ND(2)	740	ND(2)	--	ND(6)	3.8 J	1.9	ND(20)	0.062 J
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	0.54 J	38	--	--	ND(2)	--	ND(6)	--	1.9	ND(20)	0.072 J
Marketing Tank Farm Wells	MKTF-31	12/18/20	205 J	ND(2)	ND(1)	127	ND(3)	613	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200) UJ	ND(1)
Marketing Tank Farm Wells	MKTF-31	03/05/21	ND(20)	ND(1)	0.54 J	120	ND(2)	500	ND(2) UJ	110000	ND(6)	ND(6)	ND(6)	ND(20)	0.045 J
Marketing Tank Farm Wells	MKTF-31	06/17/21	ND(20)	ND(5)	0.58 J	110	ND(2)	610	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	--	0.67 J	120	--	--	ND(2)	--	ND(6)	--	75 J	ND(20)	0.12 J
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	--	0.53 J	120	--	--	ND(2)	--	ND(6)	--	0.87 J	ND(20)	0.08 J
Marketing Tank Farm Wells	MKTF-32	12/15/20	ND(200) UJ	ND(2)	2.33	50.9	ND(3)	1190	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	ND(20)	ND(5)	2.3 J	45	ND(2)	1100	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	2.4	44	--	--	ND(2)	--	ND(6)	--	1.9	ND(20)	0.092 J
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	ND(1)	2.8	46	--	--	ND(2)	--	ND(6)	--	1.7	ND(20)	0.1 J
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	55	ND(1)	0.66 J	82	ND(2)	640	ND(2)	--	ND(6)	3.5 J	ND(6)	35 J	ND(0.5)
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	0.45 J	75	--	--	ND(2)	--	ND(6)	--	1.2	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	ND(1)	0.55 J	68	--	--	ND(2)	--	ND(6)	--	0.84 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	140 J	ND(1)	0.29 J	2600	ND(2)	260	ND(2)	180000	ND(6)	ND(6)	5.4 J	4800	0.29 J
Marketing Tank Farm Wells	MKTF-35	06/23/21	ND(20) UJ	ND(1)	0.27 J	2600	ND(2)	340	ND(2)	--	ND(6)	ND(6)	ND(6)	49 J	0.21 J
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	0.48 J	3400	--	--	ND(2)	--	ND(6)	--	ND(1)	5700	0.24 J
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	0.38 J	3400	--	--	ND(2)	--	ND(6)	--	ND(1)	7100	0.15 J
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	39	ND(1)	16	7500	ND(2)	310	ND(2)	--	ND(6)	ND(6)	ND(6)	14000 J	1.7
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	21	ND(1)	0.49 J	25	ND(2)	440	ND(2)	210000	ND(6)	ND(6)	ND(6)	12 J	0.038 J
Marketing Tank Farm Wells	MKTF-38	06/23/21	80	ND(1)	0.6 J	26	ND(2)	450	ND(2)	--	ND(6)	3 J	ND(6)	33 J	0.097 J
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	0.61 J	25	--	--	ND(2)	--	ND(6)	--	0.98 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	0.79 J	26	--	--	ND(2)	--	ND(6)	--	1.3	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-39	12/16/20	19000	ND(2)	ND(2)	36100	ND(3)	491	ND(5)	--	ND(10)	ND(10)	ND(20)	32900	1.64
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	522 J	ND(2)	ND(1)	65.4	ND(3)	2080	ND(5)	--	ND(10)	ND(10)	ND(20)	281 J	1.44
Marketing Tank Farm Wells	MKTF-40	03/05/21	18 J	ND(5)	ND(5)	57	ND(2)	2000	ND(2) UJ	250000	ND(6)	2.8 J	ND(6)	17 J	ND(2.5)
Marketing Tank Farm Wells	MKTF-40	06/17/21	ND(20)	ND(5)	ND(10)	55	ND(2)	2100	ND(2)	--	ND(6)	5.2 J	ND(6)	ND(20)	ND(2.5)

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (µg/L)	Mercury, Dissolved (ug/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
Cleanup Levels			NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	--	2390	ND(0.2)	ND(100)	37.6	--	ND(5)	ND(5)	--	ND(1)	18.5	--	ND(20)
Marketing Tank Farm Wells	MKTF-24	03/09/21	36000	3400 J	ND(0.2)	ND(8)	33	2400	ND(1)	3.5 J	680000	ND(0.5)	--	--	15/ND(15)U*
Marketing Tank Farm Wells	MKTF-24	06/16/21	--	3300	ND(0.2)	ND(8)	32	--	ND(5)	ND(5)	--	ND(1.2)	--	--	13/ND(13)U*
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	3700	ND(0.2)	--	--	--	0.55 J	ND(5)	--	--	--	--	13 JB
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	4400	0.15 J	--	--	--	ND(1)	ND(5)	--	--	8.9	--	11/ND(11)U*
Marketing Tank Farm Wells	MKTF-25	12/18/20	--	2980	ND(0.2)	ND(100)	24.5	--	ND(5)	ND(5)	--	ND(1)	51.3	--	ND(20)
Marketing Tank Farm Wells	MKTF-25	03/05/21	31000	2700	ND(0.2)	ND(8)	21	1800	ND(1)	1.3 J	630000	ND(0.5)	--	--	9.5J/ND(10)U*
Marketing Tank Farm Wells	MKTF-25	06/17/21	--	2800	ND(0.2)	6.8 J	22	--	0.45 J	ND(5)	--	ND(1.2)	--	--	8.4J/ND(10)U*
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	2700	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	--	--	17 JB
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	2700	ND(0.2)	--	--	--	0.44 J	ND(5)	--	--	33	--	7.5J/ND(10)U*
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	--	254	ND(0.2)	ND(100)	33.5	--	ND(50)	ND(5)	--	ND(10)	ND(50)	--	ND(20)
Marketing Tank Farm Wells	MKTF-27	03/05/21	54000	2.9	ND(0.2)	ND(8)	24	10000	ND(5)	2.4 J	2300000	ND(2.5)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-27	06/16/21	--	9.2	--	ND(8)	28	--	ND(5)	ND(5)	--	ND(1.2)	--	--	6.4J/ND(10)U*
Marketing Tank Farm Wells	MKTF-27	09/15/21	--	18	ND(0.2)	6 J	27	--	0.56 J	ND(5)	--	ND(0.25)	--	--	14 JB
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	0.96 J	ND(0.2)	--	--	--	ND(5) UJ	ND(5)	--	--	17	--	11 JB
Marketing Tank Farm Wells	MKTF-28	12/18/20	--	ND(10)	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	119	--	ND(20)
Marketing Tank Farm Wells	MKTF-28	03/05/21	12000	8.8	ND(0.2)	ND(8)	ND(10)	1900	ND(5)	ND(5)	640000	ND(0.5)	--	--	ND(10)
Marketing Tank Farm Wells	MKTF-28	06/16/21	--	18	--	ND(8)	4.1 J	--	ND(5)	ND(5)	--	ND(1.2)	--	--	15 JB
Marketing Tank Farm Wells	MKTF-28	09/15/21	--	500	ND(0.2)	ND(8)	4.1 J	--	0.52 J	ND(5)	--	ND(0.25)	--	--	14 JB
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	4	ND(0.2)	--	--	--	0.51 J-	ND(5)	--	--	130	--	15 JB
Marketing Tank Farm Wells	MKTF-29	12/15/20	--	5140 J	ND(0.2)	ND(100)	21.3	--	ND(5)	ND(5)	--	ND(1)	18	--	ND(20)
Marketing Tank Farm Wells	MKTF-29	03/09/21	62000	4600 J	ND(0.2)	ND(8)	15	570 J	ND(1)	8	980000	ND(0.5)	--	--	14/ND(14)U*
Marketing Tank Farm Wells	MKTF-29	06/15/21	--	4600	ND(0.2)	ND(8)	13	--	ND(5)	1.7 J	--	ND(1.2)	--	--	12 JB
Marketing Tank Farm Wells	MKTF-29	09/15/21	--	4800	ND(0.2)	ND(8)	14	--	0.84 J	1.3 J	--	ND(0.25)	--	--	7.7J/ND(10)U*
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	5500	ND(0.2)	--	--	--	ND(5) UJ	1.9 J	--	--	18	--	10 J
Marketing Tank Farm Wells	MKTF-30	12/15/20	--	302 J	ND(0.2)	ND(100)	22.1 J	--	ND(5)	ND(5)	--	ND(1)	33.5	--	ND(20)
Marketing Tank Farm Wells	MKTF-30	03/09/21	16000	5 J	ND(0.2)	ND(8)	14	430 J	ND(1)	1.6 J	780000	ND(0.5)	--	--	12/ND(12)U*
Marketing Tank Farm Wells	MKTF-30	06/15/21	--	2.1	ND(0.2)	ND(8)	17	--	ND(5)	ND(5)	--	ND(1.2)	--	--	11 JB
Marketing Tank Farm Wells	MKTF-30	09/15/21	--	2.5	ND(0.2)	ND(8)	15	--	0.51 J	ND(5)	--	ND(0.25)	--	--	38 JB
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	1.4 J	ND(0.2)	--	--	--	ND(1) UJ	ND(5)	--	--	34	--	13
Marketing Tank Farm Wells	MKTF-31	12/18/20	--	36.5	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	41.3	--	ND(20)
Marketing Tank Farm Wells	MKTF-31	03/05/21	23000	18	ND(0.2)	ND(8)	ND(10)	1000	1 J	1.4 J	470000	ND(0.5)	--	--	11/ND(11)U*
Marketing Tank Farm Wells	MKTF-31	06/17/21	--	31	ND(0.2)	ND(8)	3.4 J	--	0.44 J	ND(5)	--	ND(1.2)	--	--	8.7J/ND(10)U*
Marketing Tank Farm Wells	MKTF-31	09/16/21	--	50	ND(0.2)	--	--	--	0.52 J	2 J	--	--	--	--	13 J
Marketing Tank Farm Wells	MKTF-31	12/16/21	--	40	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	45	--	8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-32	12/15/20	--	37.8 J	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	52.4	--	ND(20)
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	--	60	ND(0.2)	ND(8)	3.6 J	--	ND(5)	ND(5)	--	ND(1.2)	--	--	10 JB
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	33	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	--	--	76 J
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	51 J	ND(0.2)	--	--	--	ND(1) J	ND(5)	--	ND(0.25)	--	--	12 JB
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	--	220	ND(0.2)	ND(8)	ND(10) UJ	--	1.3	ND(5)	--	ND(0.25)	--	--	12
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	200	ND(0.2)	--	--	--	1	ND(5)	--	--	--	--	190 J
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	250	ND(0.2)	--	--	--	2	ND(5)	--	ND(0.25)	--	--	110
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	51000	3000	ND(0.2)	ND(8)	3.4 J	480 J	ND(1)	2.3 J	220000	ND(0.5)	--	--	12/ND(12)U*
Marketing Tank Farm Wells	MKTF-35	06/23/21	--	3100	ND(0.2)	ND(8)	ND(10) UJ	--	ND(1)	ND(5)	--	ND(0.25)	--	--	6.1J/ND(10)U*
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	3200	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	--	--	86 J
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	3400	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	0.62	--	75
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	--	1700	ND(0.2)	ND(8)	5.4 J-	--	ND(1)	ND(5)	--	ND(0.25)	--	--	8.4J/ND(10)U*
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	39000	78	ND(0.2)	ND(8)	ND(10)	540 J	4.9	3.1 J	340000	ND(0.5)	--	--	12/ND(12)U*
Marketing Tank Farm Wells	MKTF-38	06/23/21	--	140	ND(0.2)	ND(8)	ND(10) UJ	--	4.3	ND(5)	--	ND(0.25)	--	--	11 JB
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	210	ND(0.2)	--	--	--	2.9	ND(5)	--	--	--	--	8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	410	ND(0.2)	--	--	--	1.3	ND(5)	--	--	23	--	94
Marketing Tank Farm Wells	MKTF-39	12/16/20	--	4740	ND(0.2)	ND(100)	16.6/ND(16.6)U*	--	ND(10)	ND(5)	--	ND(1)	ND(5)	--	26.5/ND(26.5)U*
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	--	ND(10) UJ	ND(0.2)	ND(100)	11.6	--	ND(5)	ND(5)	--	ND(1)	42.1 J	--	ND(20)
Marketing Tank Farm Wells	MKTF-40	03/05/21	51000	1.1 J	ND(0.2)	ND(8)	5.1 J	5800	ND(5)	2.2 J	2200000	ND(2.5)	--	--	16 JB
Marketing Tank Farm Wells	MKTF-40	06/17/21	--	2.3	ND(0.2)	ND(8)	7 J	--	ND(10) UJ	1.4 J	--	ND(1.2)	--	--	8J/ND(10)U*

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
Cleanup Levels			19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	0.72 J	58	--	--	ND(2)	--	ND(6)	--	0.69 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	0.65 J	63	--	--	ND(2)	--	ND(6)	--	0.7 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-41	12/15/20	ND(200) UJ	ND(2)	1.95	62	ND(3)	796	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-41	03/04/21	9.3 J	ND(1)	2.7	58	ND(2)	830	ND(2)	12000	ND(6)	ND(6)	ND(6) UJ	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-41	06/15/21	6.1 J	ND(1)	1.9 J	63	ND(2)	870	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	2	64	--	--	ND(2)	--	ND(6)	--	0.58 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	ND(1)	2.2	59	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-42	12/16/20	ND(200)	ND(2)	2.22	50.2	ND(3)	770	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-42	03/04/21	ND(20)	ND(1)	3.2	46	ND(2)	750	ND(2)	19000	ND(6)	ND(6)	ND(6) UJ	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-42	06/15/21	ND(20)	ND(5)	2 J	51	ND(2)	760	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	--	2.1 J	52	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	ND(1)	2.9	48	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-43	12/15/20	316 J	ND(2)	1.39	84.5 J	ND(3)	1430	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200) UJ	ND(1)
Marketing Tank Farm Wells	MKTF-43	03/04/21	ND(20)	ND(5)	1.4 J	57	ND(2)	1200	ND(2)	1200000	ND(6)	8.1	ND(6) UJ	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-43	06/24/21	ND(100)	ND(20)	ND(20)	70	ND(10)	1400	ND(10)	--	ND(30)	27 J	ND(30)	ND(20)	ND(10)
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	--	3.2 J	85	--	--	ND(20)	--	ND(60)	--	5.7	260	0.64 J
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	--	3.2 J	65	--	--	ND(20)	--	ND(60)	--	ND(20)	1200	ND(10)
Marketing Tank Farm Wells	MKTF-44	12/23/20	ND(200)	ND(2)	9.54	40.4	ND(3)	1740	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-44	03/11/21	100	ND(1)	12	37	ND(2)	1700	ND(2)	8000	3.5 J	ND(6)	ND(6)	93	0.27 J
Marketing Tank Farm Wells	MKTF-44	06/24/21	58	ND(5)	12	29	ND(2)	1800	ND(2)	--	2.8 J	ND(6)	ND(6)	25	ND(2.5)
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	--	12	34	--	--	ND(2)	--	3.3 J	--	0.47 J	160	0.68
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	--	12	29	--	--	ND(2)	--	3.1 J	--	0.48 J	54	0.16 J
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(200)	ND(2)	ND(1)	46.8	ND(3)	196	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(20)	ND(1)	0.81 J	34	ND(2)	160	ND(2)	240000	ND(6)	3.9 J	ND(6) UJ	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-46	06/16/21	ND(20)	ND(5)	0.87 J	26	ND(2)	170	ND(2)	--	ND(6)	2.6 J	ND(6)	ND(20)	ND(2.5)
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	--	0.83 J	32	--	--	ND(2)	--	ND(6)	--	0.77 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	ND(1)	1.4	30	--	--	ND(2)	--	ND(6)	--	0.56 J	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(20)	ND(1)	0.51 J	27	ND(2)	270	ND(2)	140000	3.3 J	ND(6)	ND(6)	ND(20)	ND(0.5)
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	280	ND(2)	ND(1)	7120	ND(3)	677	ND(5)	--	ND(10)	ND(10)	ND(20)	12000	ND(1)
Marketing Tank Farm Wells	MKTF-49	03/09/21	ND(20)	ND(5)	ND(5)	9200	ND(2) UJ	650	ND(2)	350000	ND(6)	3.4 J+	ND(6)	16000	ND(2.5)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	1850	ND(2)	3.37 J	4200	ND(3)	988	ND(5)	--	ND(10)	ND(10)	ND(20)	4320	ND(1)
Marketing Tank Farm Wells	MKTF-50	03/09/21	ND(20)	ND(1)	1.7 J	3700	ND(2) UJ	870	ND(2)	130000	ND(6)	ND(6)	ND(6)	1700	ND(0.5)
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	ND(200)	ND(2)	2.49	11.7	ND(3)	177	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Production Wells	PW-3	03/12/21	ND(20)	ND(1)	3.4	12	ND(2)	180	ND(2)	--	ND(6)	ND(6)	ND(6)	500	0.056 J
Production Wells	PW-3	06/29/21	ND(20)	ND(1)	3.5	9.7	ND(2)	160	ND(2)	--	ND(6)	3.5 J	ND(6)	89	ND(0.5)
Production Wells	PW-3	09/17/21	--	--	3.7 J	9.8	--	--	ND(2)	--	ND(6)	--	ND(20)	33	ND(10)
Production Wells	PW-3	12/16/21	--	--	3.2	12	--	--	ND(2)	--	ND(6)	--	ND(1)	49	ND(0.5)
Production Wells	PW-4	12/28/20	ND(200)	ND(2)	2.22	14.7	ND(3)	ND(100)	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Production Wells	PW-4	03/12/21	ND(20)	ND(1)	2.7	14	ND(2)	65	ND(2)	--	ND(6)	ND(6)	ND(6)	100	ND(0.5)
Production Wells	PW-4	06/29/21	ND(20)	ND(1)	0.54 J	12	ND(2)	68	ND(2)	--	ND(6)	4.1 J	ND(6)	110	ND(0.5)
Production Wells	PW-4	09/17/21	--	--	ND(20)	12	--	--	ND(2)	--	ND(6)	--	ND(20)	93	ND(10)
Production Wells	PW-4	12/28/21	--	--	1.1 J	14	--	--	ND(2)	--	ND(6)	--	ND(5)	160	ND(2.5)
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	ND(200) UJ	ND(2)	ND(1)	129	ND(3)	1520	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200) UJ	ND(1)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	22	ND(1)	0.94 J	160	ND(2) UJ	1300	ND(2)	26000	ND(6)	ND(6)	5.5 J	34	0.3 J
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	ND(20) UJ	ND(1)	2.1	2500	ND(2)	410	ND(2) UJ	--	ND(6) UJ	2.5 J	ND(6)	200	ND(2.5)
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	0.75 J	--	--	--	--	--	ND(6)	--	2.6	18 J	0.17 J
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	0.76 J	--	--	--	--	--	ND(6)	--	1.4	33	0.27 J
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	ND(20)	ND(1)	14	3400	ND(2)	830	ND(2)	--	ND(6)	ND(6)	ND(6)	8000 J	ND(0.5)
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	ND(200) UJ	ND(2)	3.1	2510	ND(3)	554	ND(5)	--	ND(10)	ND(10)	ND(20)	298 J	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	ND(20)	ND(1)	1.5	2800	ND(2) UJ	420	ND(2)	72000	ND(6)	ND(6)	ND(6)	370	0.12 J
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	ND(20) UJ	ND(1)	1.8	3500	ND(2)	360	ND(2) UJ	--	ND(6) UJ	ND(6)	ND(6)	1500	0.11
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	1.7	--	--	--	--	--	ND(6)	--	ND(1)	2100	0.068 J
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	1.5	--	--	--	--	--	ND(6)	--	0.58 J	1900	0.11 J
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	ND(200) UJ	ND(2)	3.07	2170	ND(3)	688	ND(5)	--	ND(10)	ND(10)	ND(20)	329 J	ND(1)
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	ND(20)	ND(1)	1.4	2300	ND(2) UJ	490	ND(2)	110000	ND(6)	3.2 J+	ND(6)	150	0.047 J
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	ND(20) UJ	ND(1)	0.88 J	150	ND(2)	1200	ND(2) UJ	--	ND(6) UJ	ND(6)	4.6 J	21	ND(2.5)
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	3	--	--	--	--	--	ND(6)	--	0.51 J	180	ND(0.5)
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	2	--	--	--	--	--	ND(6)	--	0.8 J	330	ND(0.5)
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	ND(200) UJ	ND(2)	5.15	922	ND(3)	1570	ND(5)	--	ND(10)	ND(10)	ND(20)	809 J	5.06

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (µg/L)	Mercury, Dissolved (ug/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
Cleanup Levels			NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	1.3 J	ND(0.2)	--	--	--	0.54 J	1.5 J	--	--	--	--	7.2J/ND(10)U*
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	0.88 J	ND(0.2)	--	--	--	ND(5)	ND(5)	--	--	39	--	7.4J/ND(10)U*
Marketing Tank Farm Wells	MKTF-41	12/15/20	--	11.3 J	ND(0.2)	ND(100)	ND(6)	--	35.5	ND(5)	--	ND(1)	13.1	--	ND(20)
Marketing Tank Farm Wells	MKTF-41	03/04/21	1600	11	ND(0.2)	12	ND(10)	1600 JB	45	ND(5)	630000	ND(0.5)	--	--	13/ND(13)U*
Marketing Tank Farm Wells	MKTF-41	06/15/21	--	18	ND(0.2)	15	ND(10)	--	36	ND(5)	--	ND(1.2)	--	--	7.5J/ND(10)U*
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	14	ND(0.2)	--	--	--	39	ND(5)	--	--	--	--	11 JB
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	17	ND(0.2)	--	--	--	40	ND(5)	--	ND(0.25)	--	--	9.3J/ND(10)U*
Marketing Tank Farm Wells	MKTF-42	12/16/20	--	62.8 J	ND(0.2) UJ	ND(100)	16.6/ND(16.6)U*	--	ND(5)	ND(5)	--	ND(1)	ND(5) UJ	--	90.4/ND(90.4)U*
Marketing Tank Farm Wells	MKTF-42	03/04/21	2800	50	ND(0.2)	14	ND(10)	1300 JB	0.95 J	ND(5)	690000	ND(0.5)	--	--	9.6J/ND(10)U*
Marketing Tank Farm Wells	MKTF-42	06/15/21	--	66	ND(0.2)	22	ND(10)	--	ND(5)	ND(5)	--	ND(1.2)	--	--	13 JB
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	54	ND(0.2)	--	--	--	0.62 J	ND(5)	--	--	--	--	12 JB
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	51	ND(0.2)	--	--	--	0.78 J	ND(5)	--	ND(0.25)	--	--	7.5J/ND(10)U*
Marketing Tank Farm Wells	MKTF-43	12/15/20	--	283 J	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	113	--	ND(20)
Marketing Tank Farm Wells	MKTF-43	03/04/21	190000	1.7 J	ND(0.2)	ND(8)	ND(10)	6800	ND(5)	11 J	3500000	ND(2.5)	--	--	8.4J/ND(10)U*
Marketing Tank Farm Wells	MKTF-43	06/24/21	--	3400	ND(0.2)	ND(40)	ND(50) UJ	--	ND(20)	8.5 J	--	ND(5)	--	--	ND(50)
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	19000	ND(0.2)	--	--	--	5	ND(50)	--	--	--	--	ND(100)
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	11000	ND(0.2)	--	--	--	ND(20)	ND(50)	--	--	290	--	ND(100)
Marketing Tank Farm Wells	MKTF-44	12/23/20	--	ND(10)	ND(0.2)	ND(100)	ND(6)	--	11.9	ND(5)	--	ND(1)	162	--	ND(20)
Marketing Tank Farm Wells	MKTF-44	03/11/21	510 J	5.3	ND(0.2)	ND(8)	ND(10)	1100	10	ND(5)	490000	ND(0.5)	--	--	8.8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-44	06/24/21	--	1.4 J	ND(0.2)	ND(8)	ND(10) UJ	--	12	ND(5)	--	ND(1.2)	--	--	7.8 J
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	12	ND(0.2)	--	--	--	13	ND(5)	--	--	--	--	10 JB
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	3.3	ND(0.2)	--	--	--	11	ND(5)	--	--	160	--	14 JB
Marketing Tank Farm Wells	MKTF-46	12/16/20	--	238	ND(0.2) UJ	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-46	03/04/21	50000	300	ND(0.2)	ND(8)	ND(10)	2300 JB	1.2	2.8 J	220000	ND(0.5)	--	--	11/ND(11)U*
Marketing Tank Farm Wells	MKTF-46	06/16/21	--	420	--	ND(8)	ND(10)	--	ND(5)	ND(5)	--	ND(1.2)	--	--	7.8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	360	ND(0.2)	--	--	--	ND(1)	ND(5)	--	--	--	--	150 J
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	510	ND(0.2)	--	--	--	0.38 J	ND(5)	--	ND(0.25)	--	--	8.8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	31000	ND(2)	ND(0.2)	ND(8)	ND(10)	3300	5	2.1 J	310000	ND(0.5)	--	--	8J/ND(10)U*
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	--	6710	ND(0.2)	ND(100)	7.18	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-49	03/09/21	90000	7800	ND(0.2)	ND(8)	5.3 J	1400	ND(5)	3.9 J	880000	ND(2.5)	--	--	16/ND(16)U*
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	--	2100	ND(0.2)	ND(100)	8.06/ND(8.06)U*	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Marketing Tank Farm Wells	MKTF-50	03/09/21	35000	2200	ND(0.2)	ND(8)	11	2400	ND(5)	1.9 J	650000	ND(0.5)	--	--	6.2J/ND(10)U*
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	--	17.9	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	38.6
Production Wells	PW-3	03/12/21	--	19	ND(0.2)	ND(8)	4.7 J	--	0.86 J	3.5 J	--	ND(0.5)	--	--	98 JB
Production Wells	PW-3	06/29/21	--	12	ND(0.2)	ND(8)	ND(10)	--	0.91 J	1.5 J	--	ND(0.25)	--	--	26
Production Wells	PW-3	09/17/21	--	7	ND(0.2)	--	--	--	ND(20)	--	--	--	--	--	18
Production Wells	PW-3	12/16/21	--	11	--	--	--	--	0.62 J	--	--	--	1.4	--	15/ND(15)U*
Production Wells	PW-4	12/28/20	--	ND(10)	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Production Wells	PW-4	03/12/21	--	5.1	ND(0.2)	ND(8)	ND(10)	--	0.71 J	2.8 J	--	ND(0.5)	--	--	20 JB
Production Wells	PW-4	06/29/21	--	19	ND(0.2)	ND(8)	ND(10)	--	0.83 J	ND(5)	--	ND(0.25)	--	--	46
Production Wells	PW-4	09/17/21	--	4.5	ND(0.2)	--	--	--	ND(20)	--	--	--	--	--	61 J
Production Wells	PW-4	12/28/21	--	5.2	--	--	--	--	ND(5)	--	--	--	1.7J/ND(2.5)U*	--	19 JB
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	--	288	ND(0.2)	ND(100)	23.1	--	ND(5)	ND(5)	--	ND(1)	21.2	--	ND(20)
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	4600	310 J	ND(0.2)	ND(8)	22	2000	ND(1)	ND(5)	550000	ND(0.5)	--	--	20 JB
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	1700	ND(0.2)	ND(8)	20	--	ND(1)	ND(5)	--	ND(1.2)	--	--	7.2J/ND(10)U*
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	400	ND(0.2)	--	--	2100	0.46 J	--	560000	--	--	--	19 JB
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	490	--	--	--	--	0.41 J-	--	--	--	18	--	15
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	--	2000	ND(0.2)	12	11 J-	--	0.58 J	ND(5)	--	ND(0.25)	--	--	20 JB
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	--	716	ND(0.2)	ND(100)	11.5	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	13000	810	ND(0.2)	ND(8)	12	220 J	ND(1)	1.3 J	280000	ND(0.5)	--	--	15/ND(15)U*
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	1200	ND(0.2)	ND(8)	17	--	0.37 J	ND(5)	--	ND(0.25)	--	--	7.4J/ND(10)U*
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	1200	ND(0.2)	--	--	350 J	ND(1)	--	330000	--	--	--	11 JB
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	1400	--	--	--	--	ND(1) UJ	--	--	--	0.21 J	--	12
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	--	1550	ND(0.2)	ND(100)	36.2 J	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	64.1 J
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	20000	1600 J	ND(0.2)	ND(8)	21	370 J	ND(1)	1.9 J	380000	ND(0.5)	--	--	ND(10)
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	--	220	ND(0.2)	ND(8)	18	--	0.53 J	ND(5)	--	ND(1.2)	--	--	13 JB
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	1800	ND(0.2)	--	--	450 J	0.39 J	--	370000	--	--	--	11 JB
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	1900	--	--	--	--	ND(1) UJ	--	--	--	1.3	--	11
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	--	884	ND(0.2)	ND(100)	209	--	ND(5)	ND(5)	--	ND(1)	51.7	--	21.6

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
Cleanup Levels			19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	ND(20)	ND(1)	5.6	810	ND(2) UJ	1500	ND(2)	140000	ND(6)	9.9 J+	64 J	760	4.4
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	ND(20) UJ	ND(1)	5.9	860	ND(2)	1400	ND(2) UJ	--	ND(6) UJ	8.5	5.2 J	900	4.1
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	7.6	1200	--	--	ND(10)	--	ND(30)	--	2.8	940	8
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	4.7 J	940	--	--	ND(2)	--	ND(6)	--	ND(10)	1200	4.1 J
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	ND(200)	ND(2)	3.75	12.7	ND(3)	2440	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	ND(20)	ND(10)	3.2 J	12	ND(2)	2600	ND(2)	200000	ND(6)	3.1 J	ND(6)	14 J	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	66	ND(10)	4 J	13	ND(2)	2600	ND(2)	--	ND(6)	3.7 J	ND(6)	43	ND(5)
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	4 J	11	--	--	ND(10)	--	ND(30)	--	ND(5)	46 J	ND(2.5)
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	3.5 J	11	--	--	ND(10)	--	ND(30)	--	ND(5)	13 J	ND(2.5)
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	2460	ND(2)	1.14	47.7	ND(3)	2430	ND(5)	--	ND(10)	ND(10)	ND(20)	1110	ND(1)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	83	ND(1)	1.6	35	ND(2) UJ	2700	ND(2) UJ	110000	2.7 J	8	5.1 J	58	ND(0.5)
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	ND(20)	ND(1)	1.1	27	ND(2)	2300	ND(2)	--	4.3 J	ND(6)	3.9 J	28	ND(0.5)
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	1.3	50	--	--	ND(2)	--	4.4 J	--	1.3	210	0.35 J
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	1.3 J	31	--	--	ND(2)	--	4.2 J	--	ND(5)	ND(20)	ND(2.5)
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	ND(200)	ND(2)	2.2	117	ND(3)	2240	ND(5)	--	ND(10)	ND(10)	ND(20)	ND(200)	ND(1)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	ND(20)	ND(5)	2.5 J	94	ND(2) UJ	2300	ND(2)	82000	ND(6)	ND(6)	ND(6)	32	ND(2.5)
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	ND(20) UJ	ND(5)	2.3 J	86	ND(2)	2200	ND(2) UJ	--	ND(6) UJ	ND(6)	ND(6)	41	ND(2.5)
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	2.7	83	--	--	ND(2)	--	ND(6)	--	ND(1)	27	ND(0.5)
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	2.3	82	--	--	ND(2)	--	ND(6)	--	ND(1)	32	ND(0.5)
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	8440 J	ND(2)	2.85	14.8	ND(3)	ND(100)	ND(5)	--	2300	32.8	ND(20)	24700 J	ND(1)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	6100	ND(1)	2.6 J	44	ND(2) UJ	41	ND(2)	--	2000	31	ND(6)	21000	ND(0.5)
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	4700 J	ND(5)	0.7 J	130	ND(2)	ND(40)	3.1 J	--	200 J	25	ND(6)	130000	ND(2.5)
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	0.97 J	250	--	--	43 J	--	4000	--	1.3	950000	ND(2.5)
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	ND(5)	180	--	--	52	--	3300	--	ND(5)	990000	ND(2.5)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	1400 J	ND(2)	ND(1)	157	ND(3)	ND(100)	ND(5)	--	66.6	ND(10)	ND(20)	747 J	ND(1)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	670	ND(1)	0.26 J	93	ND(2) UJ	16 J	ND(2)	--	63	8.1	ND(6)	5500	ND(0.5)
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	33000	ND(10)	1.6 J	170	2.5	ND(40)	9.1 J	--	1800 J	40 J	ND(6)	270000 J	ND(5)
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	0.72 J	85	--	--	4.4 J	--	220	--	ND(1)	160000	ND(0.5)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	ND(5)	74	--	--	13	--	140	--	ND(5)	250000	ND(2.5)
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	ND(200)	ND(2)	2.79	3690	ND(3)	302	ND(5)	--	ND(10)	ND(10)	ND(20)	2770	ND(1)
Tank Farm Wells	OW-57	03/12/21	110	ND(1)	3.2	3800	ND(2)	300	ND(2)	--	ND(6)	ND(6)	ND(6)	4500	0.33 J
Tank Farm Wells	OW-57	06/23/21	460	ND(1)	3.3	3600	ND(2)	270	ND(2)	--	ND(6)	2.7 J	ND(6)	4800 J	0.61
Tank Farm Wells	OW-57	09/16/21	ND(20)	ND(1)	2.3	3600	ND(2)	270	ND(2)	--	ND(6)	ND(6)	ND(1)	4600	ND(0.5)
Tank Farm Wells	OW-57	12/14/21	--	--	2.4	3400	--	--	ND(2)	--	ND(6)	--	ND(1)	3500	ND(0.5)
Tank Farm Wells	OW-58	12/22/20	ND(200)	ND(2)	3.13	4560	ND(3)	351	ND(5)	--	ND(10)	ND(10)	ND(20)	7080	ND(1)
Tank Farm Wells	OW-58	03/12/21	ND(20)	ND(1)	3.5	4500	ND(2)	340	ND(2)	--	ND(6)	ND(6)	ND(6)	8100	ND(0.5)
Tank Farm Wells	OW-58	06/23/21	ND(20)	ND(1)	3.6	4600	ND(2)	350	ND(2)	--	ND(6)	ND(6)	ND(6)	9500 J	ND(0.5)
Tank Farm Wells	OW-58	09/16/21	ND(20)	ND(1)	3.3	4700	ND(2)	330	ND(2)	--	ND(6)	ND(6)	ND(1)	8600	ND(0.5)
Tank Farm Wells	OW-58	12/14/21	--	--	3.5	4800	--	--	ND(2)	--	ND(6)	--	ND(1)	9900	ND(0.5)
Tank Farm Wells	OW-58A	12/23/20	ND(200)	ND(2)	4.13	740	ND(3)	504	ND(5)	--	ND(10)	ND(10)	ND(20)	4540	1.24
Tank Farm Wells	OW-58A	03/12/21	ND(20)	ND(1)	4.4 J	790	ND(2)	500	ND(2)	--	ND(6)	ND(6)	ND(6)	3900	0.88
Tank Farm Wells	OW-58A	06/23/21	ND(20)	0.46 J	4.4	760	ND(2)	490	ND(2)	--	ND(6)	ND(6)	ND(6)	3500 J	1.1 J
Tank Farm Wells	OW-58A	09/16/21	270	ND(1)	3.6	900	ND(2)	460	ND(2)	--	ND(6)	ND(6)	0.4 J	3900	1.2
Tank Farm Wells	OW-58A	12/14/21	--	--	4.1	910	--	--	ND(2)	--	ND(6)	--	ND(1)	4200	0.85
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	ND(200)	ND(2)	8.3	4160	ND(3)	327	ND(5)	--	ND(10)	ND(10)	ND(20)	6060	ND(1)
Tank Farm Wells	OW-63	03/03/21	ND(20)	ND(1)	9.6	4100	ND(2)	340	ND(2)	75000	ND(6)	ND(6)	ND(6) UJ	5900	ND(0.5)
Tank Farm Wells	OW-63	06/15/21	ND(20)	ND(5)	8.2	4200	ND(2)	320	ND(2)	--	ND(6)	ND(6)	ND(6)	6300	ND(2.5)
Tank Farm Wells	OW-63	09/29/21	--	--	8.3	4300	--	--	ND(2)	--	ND(6)	--	ND(1)	6300	ND(0.5)
Tank Farm Wells	OW-63	12/17/21	--	--	7.7	4300	--	--	ND(2)	--	ND(6)	--	ND(1)	6200	ND(0.5)
Tank Farm Wells	OW-64	12/11/20	537	ND(2)	2.47	324	ND(3)	1790	ND(5)	--	ND(10)	ND(10)	ND(20)	234	ND(1)
Tank Farm Wells	OW-64	03/03/21	140	ND(1)	2.2	330	ND(2)	1400	ND(2)	9900	ND(6)	ND(6)	ND(6) UJ	60	0.082 J
Tank Farm Wells	OW-64	06/29/21	110	ND(1)	2.7	240	ND(2)	1700	ND(2)	--	ND(6)	ND(6)	ND(6)	55	0.07 J
Tank Farm Wells	OW-64	09/23/21	--	--	4	300	--	--	ND(2)	--	ND(6)	--	0.83 J	29 J	ND(0.5)
Tank Farm Wells	OW-64	12/29/21	--	--	2.9 J	330	--	--	ND(2)	--	ND(6)	--	ND(10)	19 J	ND(5)
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	--	--	0.53	17	--	--	ND(2)	2800	1.4	--	ND(6)	31	ND(0.5)
Western Boundary Wells	BW-1C	09/12/18	--	ND(1)	ND(1)	17	ND(2)	--	ND(2)	2900	1.3	--	ND(6)	24	ND(0.5)

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (ug/L)	Mercury, Dissolved (ug/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
Cleanup Levels			NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	27000	980 J	ND(0.2)	ND(8)	180	3700	ND(1)	2.1 J	1200000	0.039 J	--	--	34 JB
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	--	1200	ND(0.2)	5.8 J	170	--	ND(5)	ND(5)	--	ND(1.2)	--	--	28 JB
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	1400	ND(0.2)	--	--	--	1.5	ND(25)	--	--	--	--	39J/ND(50)U*
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	940	--	--	--	--	ND(10) UJ	ND(5)	--	--	33	--	19 JB
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	--	69.9	ND(0.2)	ND(100)	31.9	--	ND(5)	ND(5)	--	ND(1)	136	--	ND(20)
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	63000	100	ND(0.2)	26 J-	28	960 J	ND(10)	2.7 J	2600000	ND(5)	--	--	7.1J/ND(10)U*
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	--	45	ND(0.2)	33	29 J-	--	ND(10)	ND(5)	--	ND(2.5)	--	--	8.6 J
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	45	--	--	--	--	2.4 J	ND(25)	--	--	--	--	ND(50)
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	39	ND(0.2)	--	--	--	ND(5)	ND(25)	--	--	130	--	ND(50)
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	--	56	ND(0.2)	ND(100)	68.8	--	15.6	ND(5)	--	ND(1)	52.7	--	ND(20)
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	16000	31	ND(0.2)	5.8 J	63 J-	3300	22	ND(5)	1500000	ND(0.5)	--	--	6.5J/ND(10)U*
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	--	25	ND(0.2)	ND(8)	46 J-	--	18	3.7 J	--	ND(0.25)	--	--	7.5J/ND(10)U*
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	51	--	--	--	--	19	ND(5)	--	--	--	--	15 JB
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	6.2	--	--	--	--	19	ND(5)	--	--	50	--	110
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	--	ND(10)	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	28.3	--	ND(20)
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	11000	0.59 J	ND(0.2)	16	ND(10)	5100	5.9	ND(5)	1500000	ND(2.5)	--	--	21 JB
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	--	1.2 J	ND(0.2)	19	ND(10)	--	3.6 J	ND(5)	--	ND(1.2)	--	--	8.1J/ND(10)U*
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	0.77 J	--	--	--	--	8.1	ND(5)	--	--	--	--	13 JB
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	0.98 J	--	--	--	--	5.2 J-	1.6 J	--	--	37	--	14
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	3150	ND(0.2)	ND(100)	4160	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	3000	ND(0.2)	ND(8)	3800	--	ND(5)	ND(5)	--	ND(0.5)	--	--	240
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	8400	ND(0.2)	19	1700	--	ND(5)	ND(5)	--	ND(1.2)	--	--	15 JB
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	9900	--	--	--	--	0.8 J	ND(5)	--	--	--	--	310
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	11000	--	--	--	--	ND(5)	ND(5)	--	--	ND(2.5)	--	ND(10)
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	839	ND(0.2)	ND(100)	68.8	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	1800	ND(0.2)	ND(8)	210	--	ND(1)	5.7	--	ND(0.5)	--	--	23 JB
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	3300 J	ND(0.2)	ND(8) UJ	6600 J	--	ND(10)	ND(5)	--	ND(2.5)	--	--	150 J
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	8700	--	--	--	--	0.85 J	ND(5)	--	--	--	--	46 JB
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	15000	--	--	--	--	ND(5)	ND(5)	--	--	0.35 J	--	13 JB
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	--	2080	ND(0.2)	ND(100)	80.6	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	35.1
Tank Farm Wells	OW-57	03/12/21	--	2100	ND(0.2)	ND(8)	69	--	ND(1)	ND(5)	--	ND(0.5)	--	--	7.9J/ND(10)U*
Tank Farm Wells	OW-57	06/23/21	--	2100	ND(0.2)	ND(8)	62 J-	--	0.43 J	ND(5)	--	ND(0.25)	--	--	15 JB
Tank Farm Wells	OW-57	09/16/21	--	1900	ND(0.2)	ND(8)	64	--	ND(1)	1.3 J	--	ND(0.25)	--	--	12
Tank Farm Wells	OW-57	12/14/21	--	1800	--	--	--	--	ND(1) UJ	ND(5)	--	--	0.15 J	--	11
Tank Farm Wells	OW-58	12/22/20	--	2000	ND(0.2)	ND(100)	36.1 J	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Tank Farm Wells	OW-58	03/12/21	--	2000	ND(0.2)	ND(8)	33	--	ND(1)	ND(5)	--	ND(0.5)	--	--	16/ND(16)U*
Tank Farm Wells	OW-58	06/23/21	--	1800	ND(0.2)	ND(8)	36 J-	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-58	09/16/21	--	1800	0.23	ND(8)	40	--	ND(1)	1.5 J	--	ND(0.25)	--	--	11
Tank Farm Wells	OW-58	12/14/21	--	1700	--	--	--	--	ND(1)	ND(5)	--	--	0.14 J	--	10
Tank Farm Wells	OW-58A	12/23/20	--	1370	ND(0.2)	ND(100)	37.8	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	24.7
Tank Farm Wells	OW-58A	03/12/21	--	1400	ND(0.2)	ND(8)	33	--	ND(5)	ND(5)	--	ND(0.5)	--	--	14/ND(14)U*
Tank Farm Wells	OW-58A	06/23/21	--	1300	ND(1)	ND(8)	31 J-	--	0.42 J	ND(5)	--	ND(1.2)	--	--	13 JB
Tank Farm Wells	OW-58A	09/16/21	--	1400	ND(0.2)	ND(8)	33	--	0.48 J	ND(5)	--	ND(0.25)	--	--	14
Tank Farm Wells	OW-58A	12/14/21	--	1300	--	--	--	--	ND(1)	ND(5)	--	--	0.068 J	--	7.2 J
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	--	985	ND(0.2)	ND(100)	20.3	--	ND(5)	ND(5)	--	ND(1)	ND(5)	--	ND(20)
Tank Farm Wells	OW-63	03/03/21	14000	960	ND(0.2)	ND(8)	23	670 J	ND(1)	ND(5)	280000	ND(0.5)	--	--	ND(10)
Tank Farm Wells	OW-63	06/15/21	--	1000	ND(0.2)	ND(8)	22	--	ND(5)	ND(5)	--	ND(1.2)	--	--	ND(10)
Tank Farm Wells	OW-63	09/29/21	--	990	--	--	--	--	0.53 J	ND(5)	--	--	--	--	11 JB
Tank Farm Wells	OW-63	12/17/21	--	1000	--	--	--	--	ND(1)	ND(5)	--	--	0.31 J	--	20 JB
Tank Farm Wells	OW-64	12/11/20	--	328	ND(0.2)	ND(100)	ND(6)	--	ND(5)	ND(5)	--	ND(1)	13.1	--	ND(20)
Tank Farm Wells	OW-64	03/03/21	2900	320	ND(0.2)	16	4 J	670 J	ND(1)	ND(5)	440000	ND(0.5)	--	--	9.6J/ND(10)U*
Tank Farm Wells	OW-64	06/29/21	--	310	ND(0.2)	21	ND(10)	--	ND(1)	ND(5)	--	ND(0.25)	--	--	ND(10)
Tank Farm Wells	OW-64	09/23/21	--	340	--	--	--	--	ND(1)	ND(5)	--	--	--	--	21 JB
Tank Farm Wells	OW-64	12/29/21	--	310	--	--	--	--	ND(10)	ND(5)	--	--	10	--	19 JB
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	420	8.8	--	--	--	870	ND(5)	ND(5)	300000	--	9.2	--	10
Western Boundary Wells	BW-1C	09/12/18	410	9.3	--	--	--	1000	ND(1)	ND(5)	320000	--	8.1	ND(50)	5.8

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Aluminum, Dissolved (ug/L)	Antimony, Dissolved (ug/L)	Arsenic, Dissolved (ug/L)	Barium, Dissolved (ug/L)	Beryllium, Dissolved (ug/L)	Boron, Dissolved (ug/L)	Cadmium, Dissolved (ug/L)	Calcium, Dissolved (ug/L)	Chromium, Dissolved (ug/L)	Cobalt, Dissolved (ug/L)	Copper, Dissolved (ug/L)	Iron, Dissolved (ug/L)	Lead, Dissolved (ug/L)
Cleanup Levels			19,914	6	10	2,000	4	3,949	5	NA	100	5.98	790	13,822	NA
Western Boundary Wells	BW-1C	08/14/19	20	0.46	0.15	17	ND(2)	1600	ND(2)	2900	ND(6)	ND(6)	ND(6)	22	ND(0.5)
Western Boundary Wells	BW-1C	09/20/20	18 J	ND(1)	ND(1)	18 J+	ND(2)	1600	ND(2)	3000	ND(6)	ND(6)	ND(6)	27 J	ND(0.5)
Western Boundary Wells	BW-1C	09/29/21	--	--	0.13 J	16	--	--	ND(2)	--	ND(6)	--	ND(1)	19 J	ND(0.5)
Western Boundary Wells	BW-2A	09/13/17	--	--	7.9	130	--	--	ND(2)	8800	ND(6)	--	ND(6)	110	ND(0.5)
Western Boundary Wells	BW-2A	09/12/18	--	ND(1)	7.6	150	ND(2)	--	ND(2)	8600	ND(6)	--	ND(6)	380	ND(0.5)
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	ND(20)	ND(1)	7.8	150 J+	ND(2)	780	ND(2)	8900	ND(6)	9	ND(6)	350 J	ND(0.5)
Western Boundary Wells	BW-2A	09/29/21	--	--	5.8	120	--	--	ND(2)	--	ND(6)	--	0.48J/ND(1)U*	120	0.13 J
Western Boundary Wells	BW-2B	09/13/17	--	--	2.2	42	--	--	ND(2)	12000	ND(6)	--	ND(6)	210	ND(0.5)
Western Boundary Wells	BW-2B	09/12/18	--	ND(1)	0.73	41	ND(2)	--	ND(2)	12000	ND(6)	--	ND(6)	160	ND(0.5)
Western Boundary Wells	BW-2B	08/14/19	51	ND(1)	0.74	39	ND(2)	1700	ND(2)	12000	ND(6)	ND(6)	ND(6)	130	ND(0.5)
Western Boundary Wells	BW-2B	09/21/20	ND(20)	ND(1)	0.79 J	38	ND(2)	1800	ND(2)	12000	ND(6)	ND(6) UJ	ND(6)	190	ND(0.5)
Western Boundary Wells	BW-2B	09/29/21	--	--	0.67 J	37	--	--	ND(2)	--	ND(6)	--	1.7 JB	190	ND(0.5)
Western Boundary Wells	BW-2C	09/13/17	--	--	0.79	14	--	--	ND(2)	2000	1.4	--	ND(6)	ND(20)	ND(0.5)
Western Boundary Wells	BW-2C	09/18/18	--	--	0.77	18	--	--	ND(2)	2100	ND(6)	--	ND(6)	170	ND(0.5)
Western Boundary Wells	BW-2C	08/14/19	510	ND(1)	0.87	19	ND(2)	1100	ND(2)	2100	3.1	ND(6)	ND(6)	160	0.19
Western Boundary Wells	BW-2C	09/22/20	3600 J	ND(1) UJ	1.3	110 J	ND(2)	1200	ND(2)	11000 J	7.9	ND(6)	ND(6)	920 J	2.9 J
Western Boundary Wells	BW-2C	09/29/21	--	--	0.8 J	16	--	--	ND(2)	--	ND(6)	--	ND(1)	86	0.1 J
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	--	5.2	83	--	--	ND(2)	7700	1.6	--	ND(6)	98	ND(0.5)
Western Boundary Wells	BW-3B	09/12/18	--	ND(1)	4.7	110	ND(2)	--	ND(2)	8000	ND(6)	--	ND(6)	410	ND(0.5)
Western Boundary Wells	BW-3B	08/14/19	ND(20)	ND(1)	5.9	100	ND(2)	980	ND(2)	8000	ND(6)	ND(6)	ND(6)	350	ND(0.5)
Western Boundary Wells	BW-3B	09/21/20	ND(20)	ND(1)	5.6	100	ND(2)	990	ND(2)	8300	ND(6)	ND(6) UJ	ND(6)	370	ND(0.5)
Western Boundary Wells	BW-3B	09/29/21	--	--	5.1	92	--	--	ND(2)	--	ND(6)	--	ND(1)	85	ND(0.5)
Western Boundary Wells	BW-3C	09/13/17	--	--	1.3	23	--	--	ND(2)	3400	2.7	--	ND(6)	44	ND(0.5)
Western Boundary Wells	BW-3C	09/18/18	--	--	1	35	--	--	ND(2)	3600	ND(6)	--	ND(6)	150	ND(0.5)
Western Boundary Wells	BW-3C	08/14/19	400	ND(1)	1	29	ND(2)	970	ND(2)	3200	2.4	ND(6)	ND(6)	120	0.061
Western Boundary Wells	BW-3C	09/22/20	2400	ND(1) UJ	0.98 J	140	ND(2)	970	ND(2)	5500	14	3.1 J	ND(6)	610	1
Western Boundary Wells	BW-3C	09/29/21	--	--	0.91 J	29	--	--	ND(2)	--	ND(6)	--	ND(1)	140	0.29 J
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	1600	0.62	9.3	82	0.46	2300	ND(2)	5200	9.6	ND(6)	4.5	760	0.69
Western Boundary Wells	BW-4B	03/10/20	1000	0.62 J	9	50	0.34 J	2200	ND(2)	4800	ND(6)	ND(6)	ND(6)	490	0.16 J
Western Boundary Wells	BW-4B	03/10/21	420	0.72 J	6.6	48	ND(2)	2300	ND(2)	4800	2.4 J	ND(6)	ND(6)	440	0.094 J
Western Boundary Wells	BW-4B	09/29/21	--	--	6.4	45	--	--	ND(2)	--	ND(6)	--	1.4 JB	140	0.19 J
Western Boundary Wells	BW-4B	12/08/21	--	--	5.9	45	--	--	ND(2)	--	ND(6)	--	0.55 J	190	0.097 J
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(200)	ND(2)	ND(1)	219	ND(4)	372	ND(5)	--	ND(5)	ND(50)	ND(25)	ND(100)	ND(1)
Western Boundary Wells	BW-5B	03/03/21	ND(20)	ND(1)	0.96 J	230	ND(2)	380	ND(2)	8500	ND(6)	ND(6)	ND(6) UJ	ND(20)	ND(0.5)
Western Boundary Wells	BW-5B	06/29/21	8.7 J	ND(5)	0.96 J	220	ND(2)	340	ND(2)	--	ND(6)	ND(6)	ND(6)	ND(20)	ND(0.5)
Western Boundary Wells	BW-5B	09/23/21	--	--	0.84 J	240	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Western Boundary Wells	BW-5B	12/08/21	--	--	0.87 J	250	--	--	ND(2)	--	ND(6)	--	ND(1)	ND(20)	ND(0.5)
Western Boundary Wells	BW-5C	12/09/20	554 J	ND(2)	ND(1)	ND(200)	ND(4)	574	ND(5)	--	ND(5)	ND(50)	ND(25)	679	ND(1)
Western Boundary Wells	BW-5C	03/03/21	420 J	ND(1)	0.56 J	120	ND(2)	570	ND(2)	92000	ND(6)	ND(6)	ND(6) UJ	660	0.17 J
Western Boundary Wells	BW-5C	06/29/21	330	ND(5)	ND(5)	110	ND(2)	510	ND(2)	--	ND(6)	3 J	ND(6)	940 J	ND(2.5)
Western Boundary Wells	BW-5C	09/23/21	--	--	0.58 J	110	--	--	ND(2)	--	ND(6)	--	0.38 J	770	ND(0.5)
Western Boundary Wells	BW-5C	12/08/21	--	--	0.5 J	100	--	--	ND(2)	--	ND(6)	--	2.5 J	640	ND(2.5)

TABLE 5-4. DISSOLVED METALS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Magnesium, Dissolved (µg/L)	Manganese, Dissolved (ug/L)	Mercury, Dissolved (ug/L)	Molybdenum, Dissolved (µg/L)	Nickel, Dissolved (µg/L)	Potassium, Dissolved (µg/L)	Selenium, Dissolved (µg/L)	Silver, Dissolved (µg/L)	Sodium, Dissolved (µg/L)	Thallium, Dissolved (µg/L)	Uranium, Dissolved (µg/L)	Vanadium, Dissolved (µg/L)	Zinc, Dissolved (µg/L)
	Cleanup Levels		NA	2,017	NA	98.7	372	NA	50	81.2	NA	2	NA	63.1	5,960
Western Boundary Wells	BW-1C	08/14/19	390	8	--	12	ND(10)	830	ND(1)	ND(5)	340000	ND(0.5)	7.8	--	11
Western Boundary Wells	BW-1C	09/20/20	410 J	9.1	--	13	ND(10) UJ	820 J	ND(1)	ND(5)	300000	ND(0.5)	7.6	--	9.3J/ND(10)U*
Western Boundary Wells	BW-1C	09/29/21	--	8.6	--	--	--	--	ND(1)	--	--	--	--	--	16
Western Boundary Wells	BW-2A	09/13/17	3400	130	--	--	--	370	3.1	ND(5)	340000	--	ND(0.5)	--	8.8
Western Boundary Wells	BW-2A	09/12/18	3200	140	--	--	--	550	ND(1)	ND(5)	340000	--	ND(0.5)	ND(50)	8
Western Boundary Wells	BW-2A	08/14/19	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	3300	140	--	7.3 J	ND(10) UJ	340 J	ND(1)	ND(5)	320000	ND(0.5)	0.067 J	--	76 JB
Western Boundary Wells	BW-2A	09/29/21	--	87	--	--	--	--	ND(1)	--	--	--	--	--	9.1 J
Western Boundary Wells	BW-2B	09/13/17	3000	160	--	--	--	1400	5.5	ND(5)	580000	--	14	--	ND(10)
Western Boundary Wells	BW-2B	09/12/18	2900	150	--	--	--	1300	ND(1)	ND(5)	580000	--	11	ND(50)	6.3
Western Boundary Wells	BW-2B	08/14/19	2900	150	--	22	ND(10)	1100	ND(1)	ND(5)	620000	ND(0.5)	10	--	8
Western Boundary Wells	BW-2B	09/21/20	3000	140	--	18	ND(10)	1000 J	ND(1)	ND(5)	570000	ND(0.5)	10	--	9.9 J
Western Boundary Wells	BW-2B	09/29/21	--	140	--	--	--	--	ND(1)	--	--	--	--	--	13 J
Western Boundary Wells	BW-2C	09/13/17	350	1.5	--	--	--	640	ND(5)	ND(5)	320000	--	4.6	--	87
Western Boundary Wells	BW-2C	09/18/18	390	12	--	--	--	720	ND(1)	ND(5)	300000	--	5.9	--	5
Western Boundary Wells	BW-2C	08/14/19	440	12	--	15	ND(10)	680	ND(1)	ND(5)	340000	ND(0.5)	5.4	--	9.8
Western Boundary Wells	BW-2C	09/22/20	4200	200 J	--	ND(8)	9.1 J	2900	ND(1)	ND(5)	320000	ND(0.5)	7.7	--	19
Western Boundary Wells	BW-2C	09/29/21	--	14	--	--	--	--	ND(1)	--	--	--	--	--	ND(10)
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	2700	75	--	--	--	800	2.7	ND(5)	380000	--	0.16	--	ND(10)
Western Boundary Wells	BW-3B	09/12/18	2600	110	--	--	--	790	ND(1)	ND(5)	390000	--	0.19	ND(50)	7.6
Western Boundary Wells	BW-3B	08/14/19	2600	100	--	12	ND(10)	610	ND(1)	ND(5)	420000	ND(0.5)	0.11	--	5.1
Western Boundary Wells	BW-3B	09/21/20	2600	100	--	12	ND(10)	520 J	ND(1)	ND(5)	370000	ND(0.5)	0.086 J	--	6.5 J
Western Boundary Wells	BW-3B	09/29/21	--	96	--	--	--	--	ND(1)	--	--	--	--	--	27 J
Western Boundary Wells	BW-3C	09/13/17	560	13	--	--	--	930	ND(5)	ND(5)	360000	--	1.6	--	14
Western Boundary Wells	BW-3C	09/18/18	560	21	--	--	--	1000	ND(1)	ND(5)	350000	--	1.1	--	7.2
Western Boundary Wells	BW-3C	08/14/19	530	17	--	15	ND(10)	910	ND(1)	ND(5)	380000	ND(0.5)	1.2	--	7.8
Western Boundary Wells	BW-3C	09/22/20	6600	98	--	8.5	10	2500	ND(1)	ND(5)	360000	ND(0.5)	1.4	--	350 J
Western Boundary Wells	BW-3C	09/29/21	--	18	--	--	--	--	ND(1)	--	--	--	--	--	15
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	08/23/19	860	55	--	31	4.7	1500	0.43	ND(5)	440000	ND(0.5)	71	--	7.6
Western Boundary Wells	BW-4B	03/10/20	730 J	34	--	25	ND(10)	1500	ND(1)	ND(5)	410000	ND(0.5)	78	--	8 J
Western Boundary Wells	BW-4B	03/10/21	660 J	34	ND(0.2)	25	5.3 J	1300	ND(1)	ND(5)	400000	ND(0.5)	--	--	38 JB
Western Boundary Wells	BW-4B	09/29/21	--	18	--	--	--	--	0.55 J	--	--	--	--	--	8.9 J
Western Boundary Wells	BW-4B	12/08/21	--	16	--	--	--	--	ND(1)	--	--	--	60	--	10 JB
Western Boundary Wells	BW-5A	2017-2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	ND(15)	ND(0.2)	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	30	--	ND(20)
Western Boundary Wells	BW-5B	03/03/21	900 J	15	ND(0.2)	ND(8)	ND(10)	1500	1.2	ND(5)	570000	ND(0.5)	--	--	15/ND(15)U*
Western Boundary Wells	BW-5B	06/29/21	--	13	ND(0.2)	ND(8)	ND(10)	--	ND(5)	ND(5)	--	ND(0.25)	--	--	6.2 J
Western Boundary Wells	BW-5B	09/23/21	--	14	--	--	--	--	1.1	--	--	--	--	--	38 JB
Western Boundary Wells	BW-5B	12/08/21	--	16	--	--	--	--	0.83 J	--	--	--	30	--	15 JB
Western Boundary Wells	BW-5C	12/09/20	--	31.6	0.309	ND(40)	ND(40)	--	ND(5)	ND(5)	--	ND(1)	41.4	--	ND(20)
Western Boundary Wells	BW-5C	03/03/21	11000	34	0.14 J	ND(8)	5.4 J	4100	ND(1)	ND(5)	1300000	ND(0.5)	--	--	11/ND(11)U*
Western Boundary Wells	BW-5C	06/29/21	--	40	ND(0.2)	ND(8)	ND(10)	--	ND(5)	ND(5)	--	ND(1.2)	--	--	ND(10)
Western Boundary Wells	BW-5C	09/23/21	--	34	--	--	--	--	1.2	--	--	--	--	--	35 JB
Western Boundary Wells	BW-5C	12/08/21	--	29	--	--	--	--	0.44 J	--	--	--	43	--	90

Notes:
-- = Not Measured
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
µg/L = micrograms per liter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.
J = Estimated concentration
J- = Estimated concentration, possibly biased low
J+ = Estimated concentration, possibly biased high
JB = Estimated concentration due to blank contamination
UJ = Estimated reporting limit
U = Evaluated to be undetected at the reported concentration

* = The first result represents the laboratory reported concentration. The second result was evaluated to be undetected at the reported concentration by the data validator. The result was determined to be a false positive.

**TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO**

Location Group Name	Location ID	Date Sampled	Biochemical Oxygen Demand (µg/L)	Bromide (µg/L)	Chemical Oxygen Demand (µg/L)	Chloride (µg/L)	Conductivity (µmhos/cm)	Cyanide, Total (µg/L)	Fluoride, Total (µg/L)	Nitrate & Nitrite (µg/L)	Nitrogen, Nitrate (µg/L)	Nitrogen, Nitrate & Nitrite (µg/L)	Nitrogen, Nitrite (µg/L)	Ortho-Phosphate (µg/L)	Ortho-Phosphorus (µg/L)	Sulfate (µg/L)
	Cleanup Levels		30,000	NA	125,000	250,000	NA	1.46	1,600	NA	10,000	10,000	1,000	NA	NA	600,000
Deep Monitoring Wells	OW-01	12/11/20	--	--	--	135000	--	--	ND(1000)	--	216 JB	--	--	--	--	155000
Deep Monitoring Wells	OW-01	03/03/21	--	310	--	140000	--	--	130	--	260 JB	--	ND(100)	ND(500)	--	140000
Deep Monitoring Wells	OW-01	06/10/21	--	ND(500)	--	130000	--	--	ND(500)	--	310J/ND(500)U*	--	ND(500)	ND(2500) R	--	150000
Deep Monitoring Wells	OW-01	09/29/21	--	--	--	150000	--	--	210	--	280 JB	--	ND(100)	--	--	150000
Deep Monitoring Wells	OW-01	12/08/21	--	--	--	130000	--	--	220	--	240 JB	--	ND(100)	--	--	140000
Deep Monitoring Wells	OW-10	12/11/20	--	--	--	348000	--	--	ND(1000)	--	1130	--	--	--	--	169000
Deep Monitoring Wells	OW-10	03/12/21	--	920	--	500000	--	--	250	--	1400	--	ND(2000)	ND(500)	--	180000
Deep Monitoring Wells	OW-10	03/12/21	--	900	--	500000	--	--	250	--	1300	--	ND(2000)	ND(500)	--	170000
Deep Monitoring Wells	OW-10	06/10/21	--	870	--	370000	--	--	220	--	1100	--	ND(100)	ND(500) R	--	160000
Deep Monitoring Wells	OW-10	09/23/21	--	--	--	410000	--	--	390 J	--	1900	--	ND(500)	--	--	170000
Deep Monitoring Wells	OW-10	12/08/21	--	--	--	660000	--	--	340 J	--	1300	--	ND(500)	--	--	190000
Deep Monitoring Wells	OW-11	09/18/17	--	420	--	97000	--	--	1700	1200	--	--	--	ND(2500)	--	850000
Deep Monitoring Wells	OW-11	09/18/18	--	280	--	90000	--	--	1800	--	890	--	ND(500)	ND(10000)	--	1000000
Deep Monitoring Wells	OW-11	08/20/19	--	340	--	98000	--	--	2000	--	1600	--	ND(500)	--	ND(2500)	940000
Deep Monitoring Wells	OW-11	09/20/20	--	ND(100)	--	77000	--	--	2300	--	220	--	ND(100)	ND(500)	--	940000
Deep Monitoring Wells	OW-11	09/30/21	--	190	--	82000	--	--	2300	--	16J/ND(100)U*	--	ND(100)	ND(500)	--	1100000
Deep Monitoring Wells	OW-12	09/19/17	--	360	--	17000	--	--	520	--	110	--	ND(500)	ND(2500)	--	170000
Deep Monitoring Wells	OW-12	09/19/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	--	--	--	--	--	--	--	--	7700	--	ND(100)	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	--	160	--	20000	--	--	420	--	22J/ND(100)U*	--	ND(100)	ND(500)	--	160000
Deep Monitoring Wells	OW-13	12/09/20	--	--	--	--	--	--	--	--	5060	5060 J-	ND(100)	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	--	--	--	--	--	--	--	--	ND(100)	--	ND(100)	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	--	490 J	--	36000	--	--	310 J	ND(1000)	--	--	--	--	--	170000
Deep Monitoring Wells	OW-13	12/07/21	--	500 J-	--	36000	--	--	220	ND(1000) R	--	--	--	--	--	140000
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	--	--	--	770000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	120000
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	--	1800	--	97000	--	--	210 J	ND(1000)	--	--	--	--	--	1300 J
Eastern Boundary Wells	OW-14	12/30/21	--	1900	--	100000	--	--	ND(500)	--	59J/ND(500)U*	--	ND(500)	--	--	1600 J
Eastern Boundary Wells	OW-29	12/09/20	--	--	--	--	--	--	--	--	10000	10000 J-	ND(100)	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	--	--	--	--	--	--	--	--	ND(100)	--	ND(100)	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	--	1500	--	190000	--	--	260 J	58J/ND(1000)U*	--	--	--	--	--	65000
Eastern Boundary Wells	OW-29	12/07/21	--	1600 J-	--	160000	--	--	140	ND(1000) R	--	--	--	--	--	51000
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	--	1600	--	200000	--	--	ND(500)	ND(1000)	--	--	--	--	--	33000
Eastern Boundary Wells	OW-30	12/30/21	--	1600	--	210000	--	--	ND(500)	--	64J/ND(500)U*	--	ND(500)	--	--	34000
Eastern Boundary Wells	OW-50	12/09/20	ND(2000)	ND(5000)	10300	45600	--	--	ND(5000)	--	ND(50)	ND(50) UJ	ND(100)	--	66.8 J-	152000
Eastern Boundary Wells	OW-50	03/02/21	--	360	--	41000	1200	--	300	--	ND(100)	--	ND(100)	ND(500)	--	140000
Eastern Boundary Wells	OW-50	06/09/21	--	420 J	--	42000	1200	--	480 J	--	ND(500)	--	ND(500)	ND(2500)	--	150000
Eastern Boundary Wells	OW-50	09/24/21	--	--	--	44000	--	--	480 J	72J/ND(1000)U*	--	--	--	--	--	160000
Eastern Boundary Wells	OW-50	12/07/21	--	--	--	42000	--	--	360	ND(1000) R	--	--	--	--	--	130000
Eastern Boundary Wells	OW-52	12/09/20	ND(2000)	ND(5000)	ND(10000)	27800	--	--	ND(5000)	--	ND(50)	ND(50) UJ	ND(100)	--	ND(50) UJ	138000
Eastern Boundary Wells	OW-52	03/02/21	--	220	--	26000	1000	--	210	--	ND(100)	--	ND(100)	ND(500)	--	120000
Eastern Boundary Wells	OW-52	06/09/21	--	470 J	--	57000	1900	--	980	--	ND(500)	--	ND(500)	ND(2500)	--	290000
Eastern Boundary Wells	OW-52	09/24/21	--	--	--	26000	--	--	540	110J/ND(1000)U*	--	--	--	--	--	140000
Eastern Boundary Wells	OW-52	12/07/21	--	--	--	26000	--	--	510	ND(1000) R	--	--	--	--	--	140000
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	--	--	--	160000	--	--	260 J	ND(1000)	--	--	--	--	--	26000
Eastern Boundary Wells	OW-54	12/29/21	--	--	--	150000	--	--	ND(500)	--	84J/ND(500)U*	--	ND(500)	--	--	23000
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	--	--	--	170000	--	--	ND(500)	100J/ND(1000)U*	--	--	--	--	--	ND(2500)
Eastern Boundary Wells	OW-55	12/29/21	--	--	--	160000	--	--	ND(500)	--	120J/ND(500)U*	--	ND(500)	--	--	ND(2500)
Eastern Boundary Wells	OW-56	12/23/20	--	--	--	483000	--	--	ND(1000)	--	ND(50)	ND(100) UJ	ND(100) UJ	--	--	8260
Eastern Boundary Wells	OW-56	03/10/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Eastern Boundary Wells	OW-56	06/22/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Eastern Boundary Wells	OW-56	09/24/21	--	--	--	540000	--	--	ND(500)	66J/ND(1000)U*	--	--	--	--	--	12000
Eastern Boundary Wells	OW-56	12/23/21	--	--	--	490000	--	--	ND(500)	--	78J/ND(500)U*	--	ND(500)	--	--	9700
Eastern Boundary Wells	OW-66	09/17/21	--	--	--	320000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	1400J/ND(2500)U*
Eastern Boundary Wells	OW-66	12/07/21	--	1200 J-	--	320000	--	--	ND(500)	ND(1000) R	--	--	--	--	--	ND(2500)
Eastern Boundary Wells	OW-70	09/17/21	--	--	--	210000	--	ND(10)	390 J	--	100 J	--	ND(500)	--	--	11000
Eastern Boundary Wells	OW-70	12/22/21	--	--	--	230000	--	--	ND(500)	--	98J/ND(500)U*	--	ND(500)	--	--	8400
Evaporation Ponds	EP-2	11/21/19	1600000	ND(500)	2290000	510000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	ND(2500)	1700000
Evaporation Ponds	EP-2	09/16/20	240000	1900	379000	3400000	14000	--	51000	--	ND(500)	--	ND(2000)	ND(2500)	--	350000
Evaporation Ponds	EP-2	09/17/20	--	ND(500) UJ	--	1400 J	ND(20) UJ	--	ND(500) UJ	--	340 J	--	ND(500) UJ	ND(2500) UJ	--	ND(2500) UJ
Evaporation Ponds	EP-2	12/21/20	39800	ND(100000)	644000	3250000	--	--	ND(100000)	--	280 J	280	ND(100) UJ	--	103 J-	656000
Evaporation Ponds	EP-2	06/21/21	75000	3600	842000	3600000	17000	--	16000	--	210 J	--	ND(2000)	ND(2500)	--	1300000
Evaporation Ponds	EP-2	12/15/21	<26400 UJ	2500	437000	3800000	--	--	16000	--	ND(1000)	--	ND(1000)	--	--	1500000
Evaporation Ponds	EP-3	11/20/19	300000	2300	731000	770000	--	--	37000	--	220	--	ND(2000)	--	ND(10000)	1500000
Evaporation Ponds	EP-3	09/16/20	191000	1500	417000	3500000	15000	--	41000	--	ND(500)	--	ND(2000)	ND(2500)	--	460000
Evaporation Ponds	EP-3	12/21/20	47100	ND(500000)	376000	7190000	--	--	ND(500000)	--	98 J	98	ND(100) UJ	--	97 J-	1740000
Evaporation Ponds	EP-3	06/21/21	<8100 UJ	17000	2750000	40000000	180000	--	18000	ND(40000) R	--	--	--	ND(2500)	--	1200000
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	260000	770	800000	3100000	--	--	32000	--	ND(500)	--	ND(2000)	--	ND(2500)	1500000
Evaporation Ponds	EP-4	09/17/20	--	6100	298000	8800000	41000	--	18000	--	ND(500)	--	ND(2000)	ND(2500)	--	4000000
Evaporation Ponds	EP-4	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	09/29/20	93000 J-	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	12/21/20	40000	ND(500000)	336000	9130000	--	--	ND(500000)	--	ND(50) UJ	ND(50)	ND(100) UJ	--	ND(50) UJ	2890000
Evaporation Ponds	EP-4	06/21/21	<29100 UJ	17000	2390000	26000000	130000	--	22000	ND(40000) R	--	--	--	ND(2500)	--	10000000
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	97000	1000	618000	3900000	--	--	31000	--	ND(500)	--	ND(2000)	--	ND(2500)	1500000
Evaporation Ponds	EP-5	09/17/20	--	4800	310000	6900000	33000	--	62000	--	ND(500)	--	ND(2000)	ND(2500)	--	3400000
Evaporation Ponds	EP-5	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	09/29/20	38000 J-	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/21/20	12400	ND(500000)	217000	8970000	--	--	ND(500000)	--	ND(50) UJ	ND(50)	ND(100) UJ	--	253 J-	3570000

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	TPH (C6-C10) (µg/L)	Motor Oil (µg/L)	Oil Range Organics (µg/L)	TPH C28-C40 (µg/L)	Total Dissolved Solids (µg/L)	Solids, Total Suspended (µg/L)	Soluble Salt (µg/L)	Coliform, E-Coli (MPN/100ml)	E-Coli (MPN/100mL)	pH (Std Units)	Resistivity (Mohm/cm)	Temperature (°C)
	Cleanup Levels		16.7	10.1	10.1	85.8	85.8	85.8	500	NA	NA	500	500	6.6 – 8.6	NA	NA
Deep Monitoring Wells	OW-01	12/11/20	ND(131)	--	ND(100)	--	--	ND(131)	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	03/03/21	ND(85)	21J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	06/10/21	21J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	09/29/21	21J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-01	12/08/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/11/20	ND(133)	--	ND(100)	--	--	ND(133)	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	ND(85)	17J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	03/12/21	110	21J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	06/10/21	70 JB	30J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	09/23/21	49J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-10	12/08/21	49J/ND(64)U*	15 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/18/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	08/20/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/20/20	ND(70)	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-11	09/30/21	25J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/19/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/17/20	ND(70) UJ	370	--	--	ND(600) UJ	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-12	09/30/21	34J/ND(64)U*	120	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/09/20	ND(128)	--	134	--	--	ND(128)	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	03/02/21	ND(85)	120JD/ND(250)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	06/09/21	39J/ND(64)U*	ND(100)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	09/24/21	38 J	ND(100)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Deep Monitoring Wells	OW-13	12/07/21	42J/ND(64)U*	110 JB	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-12A	3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-12A	12/22/21	1900	8500	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-14	09/24/21	3000	59000	--	--	160	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-14	12/30/21	3000	41000	--	--	94	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/09/20	292	--	2950	--	--	ND(123)	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	03/02/21	240 J	290J/ND(500)U*	--	--	ND(600) R	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	06/09/21	290	160 J	--	--	ND(120)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	09/24/21	340	74 J	--	--	59 J	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-29	12/07/21	410	2800	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-30	09/24/21	970	100	--	--	120	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-30	12/30/21	990	1300	--	--	78 J	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/09/20	ND(129)	--	ND(100)	--	--	ND(129)	804000	98000	840000	--	--	--	0.000762	19.9 J
Eastern Boundary Wells	OW-50	03/02/21	ND(85)	24J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	8.28 J	--	--
Eastern Boundary Wells	OW-50	06/09/21	20J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	8.32 J	--	--
Eastern Boundary Wells	OW-50	09/24/21	20 J	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-50	12/07/21	21J/ND(64)U*	49J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/09/20	ND(126)	--	ND(100)	--	--	ND(126)	626000	ND(1000)	704000	--	--	--	0.000907	20 J
Eastern Boundary Wells	OW-52	03/02/21	ND(85)	23J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	8.33 J	--	--
Eastern Boundary Wells	OW-52	06/09/21	23J/ND(64)U*	30 J	--	--	ND(80)	--	--	--	--	--	--	9 J	--	--
Eastern Boundary Wells	OW-52	09/24/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-52	12/07/21	ND(64)	12J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-53	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Eastern Boundary Wells	OW-54	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-54	09/24/21	2200	430	--	--	250	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-54	12/29/21	2100	1400	--	--	140	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	4Q2020 - 2Q2021	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW	NS - RW
Eastern Boundary Wells	OW-55	09/24/21	3400 J+	28000	--	--	100 J+	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-55	12/29/21	3800	23000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/20	3380 J-	--	2560	--	--	160 J-	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	03/10/21	760	2800	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	06/22/21	1100	1400	--	--	370	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	09/24/21	1000	1200	--	--	190	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-56	12/23/21	660	760	--	--	72J/ND(110)U*	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	09/17/21	4000	69000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-66	12/07/21	3300	85000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	09/17/21	910	360	--	--	90	--	--	--	--	--	--	--	--	--
Eastern Boundary Wells	OW-70	12/22/21	1200	650	--	--	61 J	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-2	11/21/19	--	--	--	--	--	--	--	--	--	--	24200	7.99	--	--
Evaporation Ponds	EP-2	09/16/20	--	--	--	--	--	--	--	--	--	10462	--	8.15 J	--	--
Evaporation Ponds	EP-2	09/17/20	--	--	--	--	--	--	--	--	--	--	--	6.59 J	--	--
Evaporation Ponds	EP-2	12/21/20	--	--	--	--	--	--	6220000	327000	7130000	--	--	--	0.0000898	19.7 J
Evaporation Ponds	EP-2	06/21/21	--	--	--	--	--	--	--	--	--	--	144	7.81 J	--	--
Evaporation Ponds	EP-2	12/15/21	--	--	--	--	--	--	--	--	--	--	443	--	--	--
Evaporation Ponds	EP-3	11/20/19	--	--	--	--	--	--	--	--	--	--	24200	7.71	--	--
Evaporation Ponds	EP-3	09/16/20	--	--	--	--	--	--	--	--	--	5794	--	7.78 J	--	--
Evaporation Ponds	EP-3	12/21/20	--	--	--	--	--	--	13900000	353000	14500000	--	--	--	0.0000441	19.6 J
Evaporation Ponds	EP-3	06/21/21	--	--	--	--	--	--	--	--	--	--	10	7.37 J	--	--
Evaporation Ponds	EP-3	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-4	04/30/19	--	--	--	--	--	--	7170000	--	--	--	24200	7.75	--	--
Evaporation Ponds	EP-4	09/17/20	--	--	--	--	--	--	22800000	36000	--	--	--	7.73 J	--	--
Evaporation Ponds	EP-4	09/18/20	--	--	--	--	--	--	--	--	--	1607 J	--	--	--	--
Evaporation Ponds	EP-4	09/29/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-4	12/21/20	--	--	--	--	--	--	17900000	183000	18100000	--	--	--	0.0000354	19.5 J
Evaporation Ponds	EP-4	06/21/21	--	--	--	--	--	--	--	--	--	--	20	7.16 J	--	--
Evaporation Ponds	EP-4	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-5	04/30/19	--	--	--	--	--	--	8660000	--	--	--	109	7.81	--	--
Evaporation Ponds	EP-5	09/17/20	--	--	--	--	--	--	17900000	150000	--	--	--	7.97 J	--	--
Evaporation Ponds	EP-5	09/18/20	--	--	--	--	--	--	--	--	--	74 J	--	--	--	--
Evaporation Ponds	EP-5	09/29/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-5	12/21/20	--	--	--	--	--	--	19000000	97100	19000000	--	--	--	0.0000336	19.6 J
Evaporation Ponds	EP-5	06/21/21	--	--	--	--	--	--	--	--	--	--	10	7.32 J	--	--

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Biochemical Oxygen Demand (µg/L)	Bromide (µg/L)	Chemical Oxygen Demand (µg/L)	Chloride (µg/L)	Conductivity (µmhos/cm)	Cyanide, Total (µg/L)	Fluoride, Total (µg/L)	Nitrate & Nitrite (µg/L)	Nitrogen, Nitrate (µg/L)	Nitrogen, Nitrate & Nitrite (µg/L)	Nitrogen, Nitrite (µg/L)	Ortho-Phosphate (µg/L)	Ortho- Phosphorus (µg/L)	Sulfate (µg/L)
Cleanup Levels			30,000	NA	125,000	250,000	NA	1.46	1,600	NA	10,000	10,000	1,000	NA	NA	600,000
Evaporation Ponds	EP-5	12/15/21	94000	25000	4260000	65000000	--	--	27000	ND(100000) R	--	--	--	--	--	19000000
Evaporation Ponds	EP-6	04/29/19	54000	1500	393000	4100000	--	--	33000	--	ND(500)	--	2600	--	ND(2500)	1400000
Evaporation Ponds	EP-6	09/17/20	--	4400	440000	6600000	30000	--	57000	--	ND(500)	--	ND(2000)	ND(2500)	--	3200000
Evaporation Ponds	EP-6	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	09/29/20	39000 J-	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/21/20	--	ND(500000)	222000	10400000	--	--	ND(500000)	--	ND(50) UJ	ND(50)	ND(100) UJ	--	ND(50) UJ	3960000
Evaporation Ponds	EP-6	06/21/21	14000	6600	996000	11000000	51000	--	14000	--	260 J	--	ND(2000)	ND(2500)	--	5000000
Evaporation Ponds	EP-6	12/15/21	15000	6700	1550000	18000000	--	--	18000	--	ND(1000)	--	ND(10000)	--	--	8600000
Evaporation Ponds	EP-7	11/20/19	15000	71000	5040000	210000000	--	--	81000	--	--	ND(400000)	--	--	ND(100000)	21000000
Evaporation Ponds	EP-7	09/17/20	--	98000	356000	160000000	600000	--	93000	ND(100000)	--	--	--	ND(10000)	--	25000000
Evaporation Ponds	EP-7	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	09/29/20	31000 J-	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	12/21/20	--	ND(500000)	2410000	171000000	--	--	ND(500000)	--	ND(50) UJ	ND(50)	ND(100) UJ	--	ND(50) UJ	14000000
Evaporation Ponds	EP-7	06/21/21	25000	220000	12800000	200000000	620000	--	140000	ND(200000) R	--	--	--	ND(10000)	--	45000000
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	28000	60000	5170000	160000000	--	--	65000	--	--	ND(400000)	--	--	ND(100000)	14000000
Evaporation Ponds	EP-8	09/17/20	--	82000	415000	130000000	510000	--	89000	ND(100000)	--	--	--	ND(10000)	--	21000000
Evaporation Ponds	EP-8	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	09/29/20	25000 J-	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/22/20	23800	ND(500000)	3060000	201000000	--	--	ND(500000)	--	68 J	68 J-	ND(100) UJ	--	ND(50)	12400000
Evaporation Ponds	EP-8	12/28/21	51000	520000	12600000	220000000	--	--	30000	--	ND(10000)	--	ND(100000)	--	--	37000000
Evaporation Ponds	EP-9	11/20/19	15000	17000	2230000	57000000	--	--	24000	--	ND(2000)	--	ND(20000)	--	ND(10000)	6400000
Evaporation Ponds	EP-9	09/17/20	--	71000	428000	150000000	530000	--	41000	ND(100000)	--	--	--	ND(10000)	--	12000000
Evaporation Ponds	EP-9	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	09/29/20	15000 J-	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/21/20	11400	ND(500000)	2220000	183000000	--	--	ND(500000)	--	ND(50) UJ	ND(50)	ND(100) UJ	--	ND(50) UJ	13100000
Evaporation Ponds	EP-9	06/21/21	39000	270000	13500000	160000000	650000	--	150000	ND(100000) R	--	--	--	ND(10000)	--	39000000
Evaporation Ponds	EP-9	12/15/21	70000	590000	13100000	280000000	--	--	36000 J	--	ND(100000)	--	ND(100000)	--	--	36000000
Evaporation Ponds	EP-11	09/14/18	>199620	--	14000000	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-11	04/29/19	17000	24000	2160000	76000000	--	--	24000	--	ND(2000)	--	52000	--	ND(10000)	12000000
Evaporation Ponds	EP-11	12/22/20	45300	ND(500000)	3430000	16800000	--	--	ND(500000)	--	97 J	97 J-	ND(100) UJ	--	ND(50)	6130000
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	14000	--	30000000	--	--	27000	ND(20000)	--	--	--	ND(10000)	--	7600000
Evaporation Ponds	EP-12A	11/21/19	120000	ND(500)	237000	1700000	--	--	32000	--	ND(500)	--	ND(500)	--	ND(2500)	2000000
Evaporation Ponds	EP-12A	12/22/20	49000	ND(500000)	528000	198000000	--	--	ND(500000)	--	35600 J	35600 J-	ND(100) UJ	--	105	15300000
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	290000	ND(500)	448000	980000	--	--	31000	--	ND(500)	--	ND(500)	--	ND(2500)	1700000
Evaporation Ponds	EP-12B	09/18/20	71000 J-	3200 J	445000 J	8400000 J	38000 J	--	15000 J	ND(10000) UJ	--	--	--	ND(2500) R	--	4800000 J
Evaporation Ponds	EP-12B	09/18/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12B	12/22/20	46400	ND(500000)	464000	10700000	--	--	ND(500000)	--	215 J	215 J-	ND(100) UJ	--	ND(50)	4140000
Evaporation Ponds	EP-12B	06/21/21	95000	15000	4190000	24000000	110000	--	18000	ND(20000) R	--	--	--	ND(2500)	--	9400000
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	40200	--	697000	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	78000 J-	--	355000	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	<58870 UJ	--	271000	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	170000 J-	--	680000	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	<46800 UJ	--	277000	--	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	--	ND(500)	--	48000	--	ND(5)	800	--	49	--	ND(500)	ND(2500)	--	160000
Land Treatment Unit Wells	MW-1	12/06/18	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	08/12/19	--	ND(500)	--	47000	--	ND(5)	730	--	ND(500)	--	ND(500)	--	ND(2500)	170000
Land Treatment Unit Wells	MW-1	09/22/20	--	ND(500)	--	48000	--	ND(10)	630	--	ND(500)	--	ND(500)	ND(2500)	--	160000
Land Treatment Unit Wells	MW-1	09/29/21	--	110	--	49000	--	--	510	--	34J/ND(100)U*	--	ND(100)	ND(500)	--	150000
Land Treatment Unit Wells	MW-2	09/13/18	--	150	--	56000	--	ND(5)	870	--	ND(500)	--	ND(500)	ND(2500)	--	170000
Land Treatment Unit Wells	MW-2	12/06/18	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	08/13/19	--	ND(500)	--	54000	--	ND(5)	740	--	ND(500)	--	ND(500)	--	ND(2500)	170000
Land Treatment Unit Wells	MW-2	09/18/20	--	ND(500)	--	55000	--	ND(10)	840	ND(1000)	--	--	--	ND(2500) UJ	--	170000
Land Treatment Unit Wells	MW-2	09/17/21	--	--	--	56000	--	ND(5)	860	--	ND(500)	--	ND(500)	ND(2500)	--	180000
Land Treatment Unit Wells	MW-4	09/13/18	--	ND(500)	--	16000	--	ND(5)	420	--	ND(500)	--	ND(500)	ND(2500)	--	150000
Land Treatment Unit Wells	MW-4	12/06/18	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	08/13/19	--	ND(500)	--	16000	--	ND(5)	340	--	--	ND(1000)	--	--	ND(2500)	160000
Land Treatment Unit Wells	MW-4	09/18/20	--	ND(500) UJ	--	16000 J	--	ND(10) UJ	300 J	--	ND(500) UJ	--	ND(500) UJ	ND(2500) UJ	--	160000 J
Land Treatment Unit Wells	MW-4	09/17/21	--	--	--	16000	--	ND(5)	400 J	--	ND(500)	--	ND(500)	ND(2500)	--	160000
Land Treatment Unit Wells	MW-5	09/17/18	--	ND(500)	--	63000	--	ND(10)	700	--	ND(500)	--	ND(500)	ND(2500)	--	170000
Land Treatment Unit Wells	MW-5	12/06/18	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	08/14/19	--	ND(500)	--	60000	--	ND(5)	770	--	ND(500)	--	ND(500)	--	ND(2500)	180000
Land Treatment Unit Wells	MW-5	09/21/20	--	86 J	--	54000	--	ND(10)	600	--	ND(100)	--	ND(100)	ND(500)	--	150000
Land Treatment Unit Wells	MW-5	09/29/21	--	100	--	57000	--	--	680	--	19J/ND(100)U*	--	ND(100)	ND(500)	--	160000
Land Treatment Unit Wells	OW-67	09/17/21	--	--	--	4900000	--	--	ND(500)	--	170J/ND(500)U*	--	ND(500)	--	--	760000 J
Land Treatment Unit Wells	OW-67	12/23/21	--	2900	--	5200000	--	30.1	ND(500)	--	ND(500)	--	ND(500)	--	94 J	590000
Land Treatment Unit Wells	OW-68	09/17/21	--	--	--	5100000	--	--	6400	--	330J/ND(500)U*	--	140 J	--	--	800000 J
Land Treatment Unit Wells	OW-68	12/23/21	--	2000	--	4200000	--	30.1	11000	--	2700	--	ND(2000)	--	--	660000
Land Treatment Unit Wells	SMW-2	09/11/17	--	2500	--	2900000	--	36	ND(500)	ND(2000)	--	--	--	ND(2500)	--	1400000
Land Treatment Unit Wells	SMW-2	09/18/18	--	2300	--	2900000	--	--	ND(500)	--	ND(500)	--	ND(2000)	ND(2500)	--	1500000
Land Treatment Unit Wells	SMW-2	08/22/19	--	2800	--	2900000	--	37.4	93	--	ND(500)	--	3300	--	ND(2500)	1400000
Land Treatment Unit Wells	SMW-2	09/19/20	--	2800	--	2700000	--	33.7	ND(500)	--	ND(500)	--	ND(2000)	ND(2500)	--	1200000
Land Treatment Unit Wells	SMW-2	09/30/21	--	3100	--	3000000	--	--	ND(100)	--	140 JB	--	ND(2000)	--	--	1300000
Land Treatment Unit Wells	SMW-4	09/12/18	--	210	--	59000	--	ND(5)	970	--	120	--	ND(500)	ND(2500)	--	160000
Land Treatment Unit Wells	SMW-4	12/06/18	--	--	--	--	--	ND(10)	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	08/13/19	--	ND(500)	--	59000	--	ND(5)	1000	--	110	--	ND(500)	--	ND(2500)	170000
Land Treatment Unit Wells	SMW-4	09/20/20	--	120	--	50000	--	ND(10)	770	--	34 J	--	ND(100)	ND(500)	--	140000
Land Treatment Unit Wells	SMW-4	09/29/21	--	150	--	55000	--	ND(5)	900	--	60J/ND(100)U*	--	ND(100)	--	--	

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	TPH (C6-C10) (µg/L)	Motor Oil (µg/L)	Oil Range Organics (µg/L)	TPH C28-C40 (µg/L)	Total Dissolved Solids (µg/L)	Solids, Total Suspended (µg/L)	Soluble Salt (µg/L)	Coliform, E-Coli (MPN/100ml)	E-Coli (MPN/100mL)	pH (Std Units)	Resistivity (Mohm/cm)	Temperature (°C)
	Cleanup Levels		16.7	10.1	10.1	85.8	85.8	85.8	500	NA	NA	500	500	6.6 – 8.6	NA	NA
Evaporation Ponds	EP-5	12/15/21	--	--	--	--	--	--	--	--	--	--	ND(10)	--	--	--
Evaporation Ponds	EP-6	04/29/19	--	--	--	--	--	--	8510000	--	--	--	20	8.01	--	--
Evaporation Ponds	EP-6	09/17/20	--	--	--	--	--	--	18300000	130000	--	--	--	8.08 J	--	--
Evaporation Ponds	EP-6	09/18/20	--	--	--	--	--	--	--	--	--	171 J	--	--	--	--
Evaporation Ponds	EP-6	09/29/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-6	12/21/20	--	--	--	--	--	--	18900000	57000	18300000	--	--	--	0.0000349	19.4 J
Evaporation Ponds	EP-6	06/21/21	--	--	--	--	--	--	--	--	--	--	ND(10)	7.39 J	--	--
Evaporation Ponds	EP-6	12/15/21	--	--	--	--	--	--	--	--	--	--	ND(1)	--	--	--
Evaporation Ponds	EP-7	11/20/19	--	--	--	--	--	--	--	--	--	--	ND(10)	7.64	--	--
Evaporation Ponds	EP-7	09/17/20	--	--	--	--	--	--	331000000	200000	--	--	--	7.38 J	--	--
Evaporation Ponds	EP-7	09/18/20	--	--	--	--	--	--	--	--	--	ND(10) J	--	--	--	--
Evaporation Ponds	EP-7	09/29/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-7	12/21/20	--	--	--	--	--	--	283000000 J	3270000	263000000	--	--	--	ND(0.00004)	19.5 J
Evaporation Ponds	EP-7	06/21/21	--	--	--	--	--	--	--	--	--	--	ND(10)	7.28 J	--	--
Evaporation Ponds	EP-7	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	11/20/19	--	--	--	--	--	--	--	--	--	--	ND(10)	7.58	--	--
Evaporation Ponds	EP-8	09/17/20	--	--	--	--	--	--	276000000	130000	--	--	--	7.56 J	--	--
Evaporation Ponds	EP-8	09/18/20	--	--	--	--	--	--	--	--	--	ND(10) J	--	--	--	--
Evaporation Ponds	EP-8	09/29/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-8	2Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-8	12/22/20	--	--	--	--	--	--	309000000 J	4180000	283000000	--	--	--	ND(0.00004)	20.3 J
Evaporation Ponds	EP-8	12/28/21	--	--	--	--	--	--	--	--	--	--	ND(10)	--	--	--
Evaporation Ponds	EP-9	11/20/19	--	--	--	--	--	--	--	--	--	--	ND(10)	7.68	--	--
Evaporation Ponds	EP-9	09/17/20	--	--	--	--	--	--	302000000	69000	--	--	--	7.59 J	--	--
Evaporation Ponds	EP-9	09/18/20	--	--	--	--	--	--	--	--	--	ND(10) J	--	--	--	--
Evaporation Ponds	EP-9	09/29/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-9	12/21/20	--	--	--	--	--	--	300000000 J	1760000	278000000	--	--	--	ND(0.00004)	19.7 J
Evaporation Ponds	EP-9	06/21/21	--	--	--	--	--	--	--	--	--	--	ND(10)	7.27 J	--	--
Evaporation Ponds	EP-9	12/15/21	--	--	--	--	--	--	--	--	--	--	ND(10)	--	--	--
Evaporation Ponds	EP-11	09/14/18	--	--	--	--	--	--	442000000	--	--	--	ND(10)	--	--	--
Evaporation Ponds	EP-11	04/29/19	--	--	--	--	--	--	107000000	--	--	--	ND(10)	--	--	--
Evaporation Ponds	EP-11	12/22/20	--	--	--	--	--	--	312000000 J	1010000	282000000	--	--	--	ND(0.00004)	20.3 J
Evaporation Ponds	EP-11	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-11	4Q2021	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA	NS - UTA
Evaporation Ponds	EP-12A	09/07/18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Evaporation Ponds	EP-12A	11/21/19	--	--	--	--	--	--	--	--	--	--	15530	7.72	--	--
Evaporation Ponds	EP-12A	12/22/20	--	--	--	--	--	--	34400000	1280000	32200000	--	--	--	0.0000199	19.4 J
Evaporation Ponds	EP-12A	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	EP-12B	11/21/19	--	--	--	--	--	--	--	--	--	--	24200	7.64	--	--
Evaporation Ponds	EP-12B	09/18/20	--	--	--	--	--	--	22100000	140000	--	--	--	7.49 J	--	--
Evaporation Ponds	EP-12B	09/18/20	--	--	--	--	--	--	--	--	--	471 J	--	--	--	--
Evaporation Ponds	EP-12B	12/22/20	--	--	--	--	--	--	19700000	270000	19300000	--	--	--	0.0000332	19.4 J
Evaporation Ponds	EP-12B	06/21/21	--	--	--	--	--	--	--	--	--	--	ND(10)	7.2 J	--	--
Evaporation Ponds	EP-12B	4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Evaporation Ponds	STP-1 to EP-2	12/21/20	1970 J	--	141	--	--	1100 J	1930000	220000	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	03/10/21	420	20J/ND(50)U*	--	--	710	--	1930000	110000	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	06/29/21	680 J+	ND(50)	--	--	780 J+	--	2240000 J	110000 J	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	09/30/21	3600	58 J	--	--	2200	--	2420000	160000	--	--	--	--	--	--
Evaporation Ponds	STP-1 to EP-2	12/15/21	250	13 J	--	--	290	--	2300000 J	100000	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/13/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	12/06/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	08/12/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/22/20	ND(70)	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-1	09/29/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/13/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	12/06/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	08/13/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/18/20	ND(70)	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-2	09/17/21	18 J	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/13/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	12/06/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	08/13/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/18/20	ND(70) UJ	ND(50) UJ	--	--	ND(600) UJ	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-4	09/17/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/17/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	12/06/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/21/20	ND(70) UJ	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	MW-5	09/29/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	09/17/21	560	410	--	--	64 J	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-67	12/23/21	610	660	--	--	90 JB	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	09/17/21	1100	1700	--	--	120	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	OW-68	12/23/21	1500	2100	--	--	88 JB	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/11/17	410	230	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/18/18	ND(1000)	250	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	08/22/19	1100	210	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/19/20	100 J-	570	--	--	ND(600) UJ	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-2	09/30/21	380 JB	740	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/12/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	12/06/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	08/13/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/20/20	ND(70) UJ	ND(50)	--	--	ND(600) UJ	--	--	--	--	--	--	--	--	--
Land Treatment Unit Wells	SMW-4	09/29/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-01R	09/17/21	1200	19000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-01R	12/22/21	1400	23000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	12/18/20	4550	--	3150	--	--	ND(142)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02	03/10/21	1400	5800	--	--	ND(600)	--	--	--	--	--	--	--	--	--

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Biochemical Oxygen Demand (µg/L)	Bromide (µg/L)	Chemical Oxygen Demand (µg/L)	Chloride (µg/L)	Conductivity (µmhos/cm)	Cyanide, Total (µg/L)	Fluoride, Total (µg/L)	Nitrate & Nitrite (µg/L)	Nitrogen, Nitrate (µg/L)	Nitrogen, Nitrate & Nitrite (µg/L)	Nitrogen, Nitrite (µg/L)	Ortho-Phosphate (µg/L)	Ortho- Phosphorus (µg/L)	Sulfate (µg/L)
	Cleanup Levels		30,000	NA	125,000	250,000	NA	1.46	1,600	NA	10,000	10,000	1,000	NA	NA	600,000
Marketing Tank Farm Wells	MKTF-02	06/17/21	--	1300	--	3000000	--	--	ND(500)	--	ND(500)	--	ND(2000)	ND(2500)	--	100000
Marketing Tank Farm Wells	MKTF-02R	09/17/21	--	--	--	1800000	--	--	ND(500)	--	200J/ND(500)U*	--	ND(500)	--	--	710000 J
Marketing Tank Farm Wells	MKTF-02R	12/16/21	--	--	--	1900000	--	--	ND(100)	--	71J/ND(100)U*	--	ND(2000)	--	--	660000
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	--	--	--	220000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	63000 J
Marketing Tank Farm Wells	MKTF-04R	12/22/21	--	--	--	240000	--	--	280 J	--	66J/ND(500)U*	--	ND(500)	--	--	92000
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	--	--	--	937000	--	--	ND(1000) UJ	--	ND(100) UJ	--	--	--	--	ND(1000)
Marketing Tank Farm Wells	MKTF-10	03/10/21	--	800	--	930000	--	--	660	--	ND(500)	--	ND(500)	ND(2500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-10	06/23/21	--	870	--	1000000	--	--	720	--	ND(500)	--	ND(500)	ND(2500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-10	09/15/21	--	--	--	970000	--	--	630	--	ND(500)	--	ND(500)	--	--	ND(2500)
Marketing Tank Farm Wells	MKTF-10	12/16/21	--	--	--	870000	--	--	660	--	ND(500)	--	ND(500)	--	--	ND(2500)
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	--	1000	--	1700000	--	--	760	--	ND(500)	--	ND(500)	ND(2500)	--	42000
Marketing Tank Farm Wells	MKTF-11	06/17/21	--	950	--	1700000	--	--	ND(500)	--	140J/ND(500)U*	--	ND(500)	ND(2500)	--	8500
Marketing Tank Farm Wells	MKTF-11	09/15/21	--	--	--	1600000	--	--	250 J	--	ND(500)	--	ND(500)	--	--	7000
Marketing Tank Farm Wells	MKTF-11	12/16/21	--	--	--	1800000	--	--	580	--	86J/ND(500)U*	--	ND(2000)	--	--	15000
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	--	--	--	260000	--	--	160J/ND(1000)U*	--	--	--	--	--	--	12000
Marketing Tank Farm Wells	MKTF-16	12/28/21	--	--	--	83000	--	--	1700	--	860	--	ND(500)	--	--	46000
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	--	--	--	170000	--	--	790	--	390J/ND(500)U*	--	ND(500)	--	--	10000 JB
Marketing Tank Farm Wells	MKTF-17R	12/21/21	--	--	--	180000	--	--	720	--	ND(500)	--	ND(500)	--	--	4900
Marketing Tank Farm Wells	MKTF-18	12/16/20	--	--	--	279000	--	--	ND(1000)	--	ND(100)	--	--	--	--	ND(1000)
Marketing Tank Farm Wells	MKTF-18	03/11/21	--	180	--	320000	--	--	510	--	ND(100)	--	ND(100)	ND(500)	--	ND(500)
Marketing Tank Farm Wells	MKTF-18	06/23/21	--	980	--	340000	--	--	740	--	ND(500)	--	ND(500)	ND(2500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-18R	09/17/21	--	--	--	290000	--	--	680	--	ND(500)	--	ND(500)	--	--	10000 JB
Marketing Tank Farm Wells	MKTF-18R	12/21/21	--	--	--	310000	--	--	530	--	120J/ND(500)U*	--	ND(500)	--	--	ND(2500)
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	--	ND(500)	--	150000	--	--	ND(500)	--	120J/ND(500)U*	--	ND(500)	ND(2500)	--	110000
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	--	--	--	893000	--	--	ND(1000) UJ	--	ND(100) UJ	--	--	--	--	21800 JB
Marketing Tank Farm Wells	MKTF-24	03/09/21	--	1200	--	960000	--	--	ND(500)	--	ND(500)	--	ND(500)	ND(2500)	--	15000
Marketing Tank Farm Wells	MKTF-24	06/16/21	--	1200	--	1000000	--	--	ND(500)	--	100 J	--	ND(500)	ND(2500)	--	16000
Marketing Tank Farm Wells	MKTF-24	09/21/21	--	--	--	1100000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	13000
Marketing Tank Farm Wells	MKTF-24	12/16/21	--	--	--	1300000	--	--	ND(100)	--	170 JB	--	ND(2000)	--	--	13000
Marketing Tank Farm Wells	MKTF-25	12/18/20	--	--	--	844000	--	--	ND(1000) UJ	--	ND(100) UJ	--	--	--	--	68000
Marketing Tank Farm Wells	MKTF-25	03/05/21	--	1500	--	820000	--	--	ND(500)	--	ND(500)	--	ND(500)	ND(2500)	--	67000
Marketing Tank Farm Wells	MKTF-25	06/17/21	--	1400	--	760000	--	--	ND(500)	--	250J/ND(500)U*	--	ND(500)	ND(2500)	--	64000
Marketing Tank Farm Wells	MKTF-25	09/21/21	--	--	--	800000	--	--	ND(500)	--	140J/ND(500)U*	--	ND(500)	--	--	67000
Marketing Tank Farm Wells	MKTF-25	12/17/21	--	--	--	770000	--	--	ND(500)	ND(1000) R	--	--	--	--	--	62000
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	--	--	--	3400000	--	--	1920 J-	--	767 J-	--	--	--	--	430000
Marketing Tank Farm Wells	MKTF-27	03/05/21	--	1900	--	3100000	--	--	1200	--	1600	--	ND(2000)	ND(2500)	--	430000
Marketing Tank Farm Wells	MKTF-27	06/16/21	--	1600	--	2400000	--	--	1300	--	960	--	ND(2000)	ND(2500)	--	220000
Marketing Tank Farm Wells	MKTF-27	09/15/21	--	--	--	2400000	--	--	1700	--	310J/ND(500)U*	--	ND(500)	--	--	150000
Marketing Tank Farm Wells	MKTF-27	12/14/21	--	--	--	2400000	--	--	2000	--	520	--	ND(2000)	--	--	140000
Marketing Tank Farm Wells	MKTF-28	12/18/20	--	--	--	676000	--	--	1240 J-	--	ND(100) UJ	--	--	--	--	133000
Marketing Tank Farm Wells	MKTF-28	03/05/21	--	2400	--	680000	--	--	1000	--	120J/ND(500)U*	--	ND(500)	ND(2500)	--	150000
Marketing Tank Farm Wells	MKTF-28	06/16/21	--	2400	--	650000	--	--	930	--	220 J	--	ND(500)	ND(2500)	--	140000
Marketing Tank Farm Wells	MKTF-28	09/15/21	--	--	--	870000	--	--	830	--	410J/ND(500)U*	--	ND(500)	--	--	190000
Marketing Tank Farm Wells	MKTF-28	12/14/21	--	--	--	860000	--	--	930	--	120J/ND(500)U*	--	ND(500)	--	--	170000
Marketing Tank Farm Wells	MKTF-29	12/15/20	--	--	--	1670000	--	--	ND(1000)	--	ND(100)	--	--	--	--	106000
Marketing Tank Farm Wells	MKTF-29	03/09/21	--	3300	--	1700000	--	--	ND(500)	--	ND(500)	--	ND(2000)	ND(2500)	--	110000
Marketing Tank Farm Wells	MKTF-29	06/15/21	--	2600	--	1600000	--	--	ND(500)	--	ND(500)	--	ND(500)	ND(2500)	--	130000
Marketing Tank Farm Wells	MKTF-29	09/15/21	--	--	--	1800000	--	--	ND(500)	--	190J/ND(500)U*	--	ND(2000)	--	--	160000
Marketing Tank Farm Wells	MKTF-29	12/14/21	--	--	--	2000000	--	--	480	--	370	--	ND(2000)	--	--	79000
Marketing Tank Farm Wells	MKTF-30	12/15/20	--	--	--	583000	--	--	1120	--	ND(100)	--	--	--	--	529000
Marketing Tank Farm Wells	MKTF-30	03/09/21	--	1300	--	570000	--	--	1000 J	--	230 J	--	ND(500)	ND(2500)	--	560000
Marketing Tank Farm Wells	MKTF-30	06/15/21	--	1200	--	640000	--	--	900	--	ND(500)	--	ND(500)	ND(2500)	--	540000
Marketing Tank Farm Wells	MKTF-30	09/15/21	--	--	--	680000	--	--	770	--	140J/ND(500)U*	--	ND(500)	--	--	580000
Marketing Tank Farm Wells	MKTF-30	12/14/21	--	--	--	67000										

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	TPH (C6-C10) (µg/L)	Motor Oil (µg/L)	Oil Range Organics (µg/L)	TPH C28-C40 (µg/L)	Total Dissolved Solids (µg/L)	Solids, Total Suspended (µg/L)	Soluble Salt (µg/L)	Coliform, E-Coli (MPN/100ml)	E-Coli (MPN/100mL)	pH (Std Units)	Resistivity (Mohm/cm)	Temperature (°C)
	Cleanup Levels		16.7	10.1	10.1	85.8	85.8	85.8	500	NA	NA	500	500	6.6 – 8.6	NA	NA
Marketing Tank Farm Wells	MKTF-02	06/17/21	1800 J	5100	--	--	61 J	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02R	09/17/21	220	560	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-02R	12/16/21	190	540 J+	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-03	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-04R	09/17/21	2200	5200	--	--	96	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-04R	12/22/21	1200	2100	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-05	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-06	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-07	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-08	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-09	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-10	12/18/20	5540	--	31800	--	--	ND(129)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	03/10/21	1400	40000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	06/23/21	2100	45000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	09/15/21	1800	48000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-10	12/16/21	2300	37000 J+	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-11	03/10/21	620	14000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	06/17/21	1000 J	19000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	09/15/21	880	25000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-11	12/16/21	770	12000 J+	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-12	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-13	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-14	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-15	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-16	12/23/20	--	--	32000	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	03/11/21	--	17000	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-16	09/24/21	ND(1700) UJ	13000	--	--	ND(8300) UJ	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-16	12/28/21	350	61	--	--	230	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-17	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-17R	09/17/21	1800	29000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-17R	12/21/21	1800	28000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18	12/16/20	2930	--	1250	--	--	ND(148)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18	03/11/21	5800	1500	--	--	2200	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18	06/23/21	1500	1900	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18R	09/17/21	4600 J	13000 J	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-18R	12/21/21	4400	6700	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-19	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	1Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-20	2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-20	3Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-21	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-21	03/11/21	--	1800 J+	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-21	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-22	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-23	2Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-23	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-24	12/18/20	2470	--	14300	--	--	ND(126)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	03/09/21	480	15000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	06/16/21	690 J	1400	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	09/21/21	650 J	18000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-24	12/16/21	670	12000 J+	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/18/20	1860	--	3650	--	--	ND(142)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	03/05/21	320	4100	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	06/17/21	540 J	4400	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	09/21/21	630 J	2900	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-25	12/17/21	600	3300	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-26	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-27	12/18/20	1340	--	ND(100)	--	--	444	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	03/05/21	110	25J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	06/16/21	130 JB	29J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	09/15/21	150 JB	ND(50)	--	--	93	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-27	12/14/21	120	21 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	12/18/20	336	--	ND(100)	--	--	ND(134)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	03/05/21	87	23J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	06/16/21	120 JB	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	09/15/21	150 JB	ND(50)	--	--	78 J	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-28	12/14/21	150	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	12/15/20	847	--	ND(100)	--	--	ND(131)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	03/09/21	940	24J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	06/15/21	200	54 JB	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	09/15/21	280 JB	ND(50)	--	--	71 J	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-29	12/14/21	340	29 J	--	--	55 J	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	12/15/20	368	--	ND(100)	--	--	ND(138)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	03/09/21	ND(85)	71 JB	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	06/15/21	83 JB	65 JB	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	09/15/21	100 JB	43 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-30	12/14/21	110	50 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/18/20	800	--	276	--	--	ND(141)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	03/05/21	110	220JD/ND(250)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	06/17/21	200 JB	230J/ND(250)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	09/16/21	210	110 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-31	12/16/21	220	430 J+	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/15/20	631	--	856	--	--	ND(140)	--	--	--	--	--	--	--	--

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Biochemical Oxygen Demand (µg/L)	Bromide (µg/L)	Chemical Oxygen Demand (µg/L)	Chloride (µg/L)	Conductivity (µmhos/cm)	Cyanide, Total (µg/L)	Fluoride, Total (µg/L)	Nitrate & Nitrite (µg/L)	Nitrogen, Nitrate (µg/L)	Nitrogen, Nitrate & Nitrite (µg/L)	Nitrogen, Nitrite (µg/L)	Ortho-Phosphate (µg/L)	Ortho- Phosphorus (µg/L)	Sulfate (µg/L)
Cleanup Levels			30,000	NA	125,000	250,000	NA	1.46	1,600	NA	10,000	10,000	1,000	NA	NA	600,000
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	--	--	--	1100	--	--	350 J	--	ND(500)	--	--	ND(500)	--	81000
Marketing Tank Farm Wells	MKTF-32	09/14/21	--	--	--	--	--	--	420 J	--	82J/ND(500)U*	--	--	ND(500)	--	87000
Marketing Tank Farm Wells	MKTF-32	12/09/21	--	--	--	--	--	--	300	--	ND(100)	--	--	ND(100)	--	78000
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	--	1000	--	320000	--	--	370 J	--	5400	--	--	ND(500)	--	200000
Marketing Tank Farm Wells	MKTF-34	09/14/21	--	--	--	240000	--	--	610	--	7000	--	--	120 J	--	300000
Marketing Tank Farm Wells	MKTF-34	12/09/21	--	--	--	240000	--	--	480	--	5700	--	--	ND(100)	--	310000
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	--	800	--	360000	--	--	590	--	ND(500)	--	--	ND(500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-35	06/23/21	--	870	--	390000	--	--	700	--	ND(500) UJ	--	--	ND(500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-35	09/14/21	--	--	--	420000	--	--	780	--	110J/ND(500)U*	--	--	ND(500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-35	12/21/21	--	--	--	380000	--	--	700	--	110J/ND(500)U*	--	--	ND(500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	--	720	--	300000	--	--	770	--	ND(500)	--	--	ND(500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-36	06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	--	540	--	410000	--	--	590	--	8300	--	--	ND(2000)	--	500000
Marketing Tank Farm Wells	MKTF-38	06/23/21	--	640	--	320000	--	--	940	--	6200	--	--	ND(500)	--	520000
Marketing Tank Farm Wells	MKTF-38	09/22/21	--	--	--	200000	--	--	930	--	4600	--	--	ND(500)	--	510000
Marketing Tank Farm Wells	MKTF-38	12/21/21	--	--	--	220000	--	--	800	--	2000	--	--	ND(100)	--	510000
Marketing Tank Farm Wells	MKTF-39	12/16/20	--	--	--	6020000	--	--	ND(1000)	--	ND(100)	--	--	--	--	32600
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	--	--	--	3160000	--	--	ND(1000)	--	ND(100) UJ	--	--	--	--	428000
Marketing Tank Farm Wells	MKTF-40	03/05/21	--	1400	--	3200000	--	--	ND(500)	--	140J/ND(500)U*	--	--	ND(2000)	--	520000
Marketing Tank Farm Wells	MKTF-40	06/17/21	--	1400	--	3400000	--	--	ND(500)	--	200J/ND(500)U*	--	--	ND(2000)	--	530000
Marketing Tank Farm Wells	MKTF-40	09/21/21	--	--	--	3500000	--	--	ND(500)	--	140J/ND(500)U*	--	--	ND(500)	--	550000
Marketing Tank Farm Wells	MKTF-40	12/17/21	--	--	--	3300000	--	--	ND(500)	ND(4000) R	--	--	--	--	--	500000
Marketing Tank Farm Wells	MKTF-41	12/15/20	--	--	--	839000	--	--	ND(1000)	--	5450	--	--	--	--	59500
Marketing Tank Farm Wells	MKTF-41	03/04/21	--	2100	--	880000	--	--	170	--	5300	--	210	ND(500)	--	57000
Marketing Tank Farm Wells	MKTF-41	06/15/21	--	2100	--	790000	--	--	470 J	--	4600	--	340 J	ND(2500)	--	57000
Marketing Tank Farm Wells	MKTF-41	09/14/21	--	--	--	800000	--	--	480 J	--	5300	--	320 J	--	--	66000
Marketing Tank Farm Wells	MKTF-41	12/09/21	--	--	--	740000	--	--	450 J	--	5100	--	--	ND(500)	--	63000
Marketing Tank Farm Wells	MKTF-42	12/16/20	--	--	--	909000	--	--	1310	--	ND(100)	--	--	--	--	114000
Marketing Tank Farm Wells	MKTF-42	03/04/21	--	1600	--	910000	--	--	840	--	ND(500)	--	--	ND(500)	--	140000
Marketing Tank Farm Wells	MKTF-42	06/15/21	--	1500	--	850000	--	--	1000	--	ND(500)	--	--	ND(500)	--	120000
Marketing Tank Farm Wells	MKTF-42	09/14/21	--	--	--	990000	--	--	1100	--	72J/ND(500)U*	--	--	ND(500)	--	110000
Marketing Tank Farm Wells	MKTF-42	12/09/21	--	--	--	890000	--	--	1000	--	ND(500)	--	--	ND(500)	--	100000
Marketing Tank Farm Wells	MKTF-43	12/15/20	--	--	--	8080000	--	--	ND(1000)	--	2760	--	--	--	--	782000
Marketing Tank Farm Wells	MKTF-43	03/04/21	--	5600	--	7200000	--	--	ND(500)	--	1700	--	--	ND(2000)	--	960000
Marketing Tank Farm Wells	MKTF-43	06/24/21	--	8300	--	8100000	--	--	ND(500)	--	ND(500)	--	--	ND(2500)	--	970000
Marketing Tank Farm Wells	MKTF-43	09/23/21	--	--	--	19000000	--	--	ND(2000)	ND(10000)	--	--	--	--	--	2400000
Marketing Tank Farm Wells	MKTF-43	12/08/21	--	--	--	15000000	--	--	ND(500)	ND(10000) R	--	--	--	--	--	1600000
Marketing Tank Farm Wells	MKTF-44	12/23/20	--	--	--	302000	--	--	ND(1000)	--	1850	--	--	--	--	104000
Marketing Tank Farm Wells	MKTF-44	03/11/21	--	580	--	230000	--	--	ND(500)	--	1500	--	--	ND(500)	--	120000
Marketing Tank Farm Wells	MKTF-44	06/24/21	--	580	--	190000	--	--	310 J	--	1000	--	--	ND(500)	--	120000
Marketing Tank Farm Wells	MKTF-44	09/30/21	--	--	--	170000	--	--	440 J	--	1100 JB	--	--	ND(500)	--	120000
Marketing Tank Farm Wells	MKTF-44	12/23/21	--	--	--	150000	--	--	380 J	--	890	--	--	ND(500)	--	120000
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	--	--	--	575000	--	--	ND(1000)	--	7480	--	--	--	--	292000
Marketing Tank Farm Wells	MKTF-46	03/04/21	--	420	--	560000	--	--	130	--	7700	--	--	ND(2000)	--	310000
Marketing Tank Farm Wells	MKTF-46	06/16/21	--	280 J	--	340000	--	--	420 J	--	2100	--	--	ND(500)	--	490000
Marketing Tank Farm Wells	MKTF-46	09/14/21	--	--	--	390000	--	--	480 J	--	1800	--	--	ND(500)	--	440000
Marketing Tank Farm Wells	MKTF-46	12/09/21	--	--	--	350000	--	--	390	--	970	--	--	ND(100)	--	310000
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	--	500	--	400000	--	--	690	--	9700	--	--	ND(2000)	--	310000
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	--	--	--	1560000	--	--	ND(1000)	--	ND(100)	--	--	--	--	ND(1000)
Marketing Tank Farm Wells	MKTF-49	03/09/21	--	1000	--	1700000	--	--	ND(500)	--	ND(500)	--	--	ND(500)	--	ND(2500)
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	--	--	--	665000	--	--	3300	--	4310	--	--	--	--	11500 JB
Marketing Tank Farm Wells	MKTF-50	03/09/21	--	1800	--	760000	--	--	3100	--	ND(500)	--	--	ND(500)	--	4700
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	--	--	--	--	--	ND(5)	--	--	185H/ND(185)U*	185/ND(185)U*	ND(100) UJ	--	--	--
Production Wells	PW-3	03/12/21	--	--	--	--	--	ND(5)	--	--	150J/ND(500)U*	--	--	ND(500)	--	--
Production Wells	PW-3	06/29/21	--	--	--	--	--	ND(5) UJ	--	--	140J/ND(500)U*	--	--	ND(500)	--	--
Production Wells	PW-3	09/17/21	--	--	--	--	--	ND(5)	--	--	--	--	--	ND(500)	--	--
Production Wells	PW-3	12/16/21	--	--	--	--	--	ND(10)	--	--	--	--	--	ND(100)	--	--
Production Wells	PW-4	12/28/20	--	--	--	--	--	ND(5)	--	--	112H/ND(112)U*	112/ND(112)U*	--	--	--	--
Production Wells	PW-4	03/12/21	--	--	--	--	--	ND(5)	--	870J/ND(1000)U*	--	--	--	--	--	--
Production Wells	PW-4	06/29/21	--	--	--	--	--	ND(5) UJ	--	--	ND(500)	--	--	ND(500)	--	--
Production Wells	PW-4	09/17/21	--	--	--	--	--	ND(5)	--	--	--	--	--	ND(500)	--	--
Production Wells	PW-4	12/28/21	--	--	--	--	--	ND(5)	--	--	--	--	--	ND(100)	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	--	--	--	342000	--	--	ND(1000)	--	1090	--	--	--	--	74500
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	--	2100	--	310000	--	--	510	--	430	--	--	ND(100)	--	49000
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	--	2100	--	260000	--	--	740	--	ND(500)	--	--	ND(500)	--	4300
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	--	--	--	340000	--	--	660	--	520	--	--	ND(500)	--	34000
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	--	--	--	360000</										

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	TPH (C6-C10) (µg/L)	Motor Oil (µg/L)	Oil Range Organics (µg/L)	TPH C28-C40 (µg/L)	Total Dissolved Solids (µg/L)	Solids, Total Suspended (µg/L)	Soluble Salt (µg/L)	Coliform, E-Coli (MPN/100ml)	E-Coli (MPN/100mL)	pH (Std Units)	Resistivity (Mohm/cm)	Temperature (°C)
	Cleanup Levels		16.7	10.1	10.1	85.8	85.8	85.8	500	NA	NA	500	500	6.6 – 8.6	NA	NA
Marketing Tank Farm Wells	MKTF-32	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-32	06/15/21	140 JB	96J/ND(100)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	09/14/21	210 JB	53 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-32	12/09/21	220 J	930	--	--	ND(130)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-33	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-34	06/24/21	68 JB	370	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-34	09/14/21	68 JB	330	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-34	12/09/21	150 JB	480	--	--	ND(130)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-35	03/11/21	820	15000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	06/23/21	1400	14000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	09/14/21	1300 J-	19000	--	--	ND(93) R	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-35	12/21/21	1600	29000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-36	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-36	06/23/21	8200	75000	--	--	ND(1600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-36	06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-36	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-37	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-38	03/11/21	ND(85)	20J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	06/23/21	32J/ND(64)U*	28J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	09/22/21	ND(85)	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-38	12/21/21	150 JB	24 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-39	12/16/20	6820	--	252	--	--	ND(146)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-39	1Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-40	12/17/20	223	--	ND(100)	--	--	ND(146)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	03/05/21	ND(85)	24J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	06/17/21	63J/ND(64)U*	29J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	09/21/21	40J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-40	12/17/21	44J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/15/20	3400	--	ND(100)	--	--	ND(129)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	03/04/21	600	56 JB	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	06/15/21	810	45J/ND(50)U*	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	09/14/21	1400	47 J	--	--	260	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-41	12/09/21	1600	82 JB	--	--	ND(130)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/16/20	42500	--	181	--	--	2240 J	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	03/04/21	17000	210 JB	--	--	ND(6000)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	06/15/21	19000	210 JB	--	--	ND(8000)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	09/14/21	21000	390	--	--	ND(4000)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-42	12/09/21	26000	500	--	--	ND(4000)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/15/20	276	--	ND(100)	--	--	ND(157)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	03/04/21	79 J+	24J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	06/24/21	150	60	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	09/23/21	130 JB	ND(50)	--	--	58J/ND(80)U*	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-43	12/08/21	160 JB	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/20	171	--	ND(100)	--	--	ND(156)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	03/11/21	ND(85)	15J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	06/24/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	09/30/21	59J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-44	12/23/21	18J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-45	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-46	12/16/20	ND(152)	--	ND(100)	--	--	ND(152)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	03/04/21	ND(85)	24J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	06/16/21	43J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	09/14/21	59J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-46	12/09/21	170 JB	40J/ND(50)U*	--	--	ND(140)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-47	4Q2020	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-47	03/11/21	ND(85)	16J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-47	2Q2021 - 3Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Marketing Tank Farm Wells	MKTF-47	4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-48	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-49	12/23/20	5750	--	84600	--	--	ND(147)	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-49	03/09/21	2200	86000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-49	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Marketing Tank Farm Wells	MKTF-50	12/16/20	7410	--	17000	--	--	327	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-50	03/09/21	2500	21000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Marketing Tank Farm Wells	MKTF-50	2Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Production Wells	PW-3	12/28/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-3	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-3	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-3	09/17/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Production Wells	PW-3	12/16/21	ND(64)	14 J+	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	03/12/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	06/29/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	09/17/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Production Wells	PW-4	12/28/21	ND(64)	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	GWM-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	GWM-2	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	GWM-3	4Q2020 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	KA-3	12/17/20	1140	--	107 J-	--	--	ND(139)	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	03/09/21	330	110 JB	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	06/22/21	380 JB	150 JB	--	--	86	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	09/21/21	430 J	170	--	--	140	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	KA-3	12/14/21	570	200	--	--	86	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-1	4Q2020 - 1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-1	06/23/21	1100	34000	--	--	ND(80)	--	--	--	--	--	--	--	--	--

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Biochemical Oxygen Demand (µg/L)	Bromide (µg/L)	Chemical Oxygen Demand (µg/L)	Chloride (µg/L)	Conductivity (µmhos/cm)	Cyanide, Total (µg/L)	Fluoride, Total (µg/L)	Nitrate & Nitrite (µg/L)	Nitrogen, Nitrate (µg/L)	Nitrogen, Nitrate & Nitrite (µg/L)	Nitrogen, Nitrite (µg/L)	Ortho-Phosphate (µg/L)	Ortho- Phosphorus (µg/L)	Sulfate (µg/L)
	Cleanup Levels		30,000	NA	125,000	250,000	NA	1.46	1,600	NA	10,000	10,000	1,000	NA	NA	600,000
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	--	--	--	--	--	--	2040 J+	--	--	--	--	--	--	3970
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	--	1100	--	200000	--	--	1900	--	ND(500)	--	ND(500)	ND(2500)	--	1900 J
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	--	1300	--	280000	--	--	1700	--	ND(500)	--	ND(500)	ND(2500)	--	1400 J
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	--	--	--	300000	--	--	1800	--	ND(500)	--	ND(500)	ND(2500)	--	ND(2500)
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	--	--	--	300000	--	--	1400	--	63 J	--	ND(500)	ND(2500)	--	ND(2500)
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	--	--	--	266000	--	--	ND(1000)	--	ND(100)	--	--	--	--	7480
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	--	2100	--	270000	--	--	600	--	370	--	ND(100)	ND(500)	--	5600
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	--	2100	--	310000	--	--	630	--	ND(500)	--	ND(500)	ND(2500)	--	41000
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	--	--	--	330000	--	--	850	--	ND(500)	--	ND(500)	ND(2500)	--	4000
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	--	--	--	360000	--	--	590	--	330	--	ND(100)	ND(500)	--	4100
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	--	--	--	1420000	--	--	1970 J+	--	ND(100) UJ	--	--	--	--	10700
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	--	4900	--	1500000	--	81.3	1700	--	330 J	--	ND(500)	ND(2500)	--	22000
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	--	4500	--	1400000	--	70.5	1800	--	290 J	--	ND(500)	ND(2500)	--	15000
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	--	--	--	1300000	--	--	1800	--	ND(500)	--	ND(500)	--	--	9600
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	--	--	--	1400000	--	79.5	1800	--	ND(500)	--	ND(500)	--	--	11000
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	--	--	--	2270000	--	--	ND(1000)	--	ND(100)	--	--	--	--	2510000
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	--	2500	--	2200000	--	--	ND(100)	--	ND(100)	--	ND(2000)	ND(10000)	--	2400000
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	--	2800	--	2200000	--	--	ND(500)	--	ND(500)	--	ND(2000)	ND(2500)	--	2300000
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	--	--	--	2400000	--	--	ND(500)	--	200J/ND(500)U*	--	ND(2000)	--	--	2500000
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	--	--	--	2100000	--	--	ND(500)	--	320J/ND(500)U*	--	--	76 J	--	2100000
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/15/20	--	--	--	1740000	--	--	ND(1000)	--	19300 J	--	--	--	--	647000
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	--	4300	--	1800000	--	--	ND(500)	--	19000	--	ND(500)	ND(2500)	--	630000
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	--	4600	--	1700000	--	--	630	--	19000	--	110 J	ND(2500)	--	640000
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	--	--	--	1800000	--	--	510	--	20000	--	ND(500)	--	--	640000
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	--	--	--	1700000	--	--	290 J	19000 J-	--	--	--	--	--	670000
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	--	--	--	2440000	--	--	ND(1000)	--	27600 J	--	--	--	--	155000
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	--	3800	--	2000000	--	--	120	--	23000	--	ND(2000)	ND(500)	--	150000
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	--	4100	--	2400000	--	--	ND(500)	--	27000	--	ND(500)	ND(2500)	--	190000
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	--	--	--	2100000	--	--	ND(500)	--	25000	--	ND(2000)	--	--	180000
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	--	--	--	2200000	--	--	ND(2000)	--	25000	--	ND(2000)	--	--	150000
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	--	--	--	139000	--	--	ND(1000)	--	82	82	ND(100) UJ	--	--	ND(1000)
Tank Farm Wells	OW-57	03/12/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Tank Farm Wells	OW-57	06/23/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Tank Farm Wells	OW-57	09/16/21	--	--	--	110000	--	--	560	--	160J/ND(500)U*	--	ND(500)	--	--	ND(2500)
Tank Farm Wells	OW-57	12/14/21	--	--	--	98000	--	--	480 J	--	68 J	--	ND(500)	--	--	ND(2500)
Tank Farm Wells	OW-58	12/22/20	--	--	--	160000	--	--	ND(1000)	--	ND(50)	ND(50) UJ	ND(100)	--	--	ND(1000)
Tank Farm Wells	OW-58	03/12/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Tank Farm Wells	OW-58	06/23/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Tank Farm Wells	OW-58	09/16/21	--	--	--	190000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	ND(2500)
Tank Farm Wells	OW-58	12/14/21	--	--	--	190000	--	--	ND(500)	--	110 J	--	ND(500)	--	--	ND(2500)
Tank Farm Wells	OW-58A	12/23/20	--	--	--	176000	--	--	ND(1000)	--	ND(50)	ND(50)	ND(100) UJ	--	--	8700
Tank Farm Wells	OW-58A	03/12/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Tank Farm Wells	OW-58A	06/23/21	--	--	--	--	--	--	--	--	ND(500)	--	ND(500)	--	--	--
Tank Farm Wells	OW-58A	09/16/21	--	--	--	170000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	2100 J
Tank Farm Wells	OW-58A	12/14/21	--	--	--	160000	--	--	ND(500)	--	ND(500)	--	ND(500)	--	--	ND(2500)
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	--	--	--	80900	--	--	ND(1000)	--	ND(100)	--	--	--	--	ND(1000)
Tank Farm Wells	OW-63	03/03/21	--	400 J	--	86000	--	--	460 J	--	110J/ND(500)U*	--	ND(500)	ND(2500)	--	ND(2500)
Tank Farm Wells	OW-63	06/15/21	--	380 J	--	85000	--	--	530	ND(1000) R	--	--	--	ND(2500)	--	ND(2500)
Tank Farm Wells	OW-63	09/29/21	--	--	--	95000	--	--	570	--	70J/ND(500)U*	--	ND(500)	--	--	ND(2500)
Tank Farm Wells	OW-63	12/17/21	--	--	--	94000	--	--	600	ND(1000) R	--	--	--	--	--	ND(2500)
Tank Farm Wells	OW-64	12/11/20	--	--	--	31600	--	--	5370	--	ND(100)	--	--	--	--	22300 JB
Tank Farm Wells	OW-64	03/03/21	--	1400	--	28000	--	--	4800	--	ND(500)	--	ND(500)	ND(2500)	--	16000
Tank Farm Wells	OW-64	06/29/21	--	1500	--	40000	--	--	4600	--	ND(500)	--	ND(500)	ND(2500)	--	34000
Tank Farm Wells	OW-64	09/23/21	--	--	--	38000	--	--	4900	--	71J/ND(500)U*	--	ND(500)	--	--	32000
Tank Farm Wells	OW-64	12/29/21	--	--	--	26000	--	--	4300	--	ND(500)	--	ND(500)	--	--	16000
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	--	150	--	32000	--	--	2100	--	ND(500)	--	ND(500)	ND(2500)	--	230000
Western Boundary Wells	BW-1C	09/12/18	--	160	--	33000	--	--	2400	ND(1000)	--	--	--	ND(2500)	--	230000
Western Boundary Wells	BW-1C	08/14/19	--	150	--	33000	--	--	2200	--	ND(500)	--	66	--	ND(2500)	250000
Western Boundary Wells	BW-1C	09/20/20	--	ND(500)	--	34000	--	--	2500	--	ND(500)	--	ND(500)	ND(2500)	--	260000
Western Boundary Wells	BW-1C	09/29/21	--	120	--	34000	--	--								

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	TPH (C6-C10) (µg/L)	Motor Oil (µg/L)	Oil Range Organics (µg/L)	TPH C28-C40 (µg/L)	Total Dissolved Solids (µg/L)	Solids, Total Suspended (µg/L)	Soluble Salt (µg/L)	Coliform, E-Coli (MPN/100ml)	E-Coli (MPN/100mL)	pH (Std Units)	Resistivity (Mohm/cm)	Temperature (°C)
	Cleanup Levels		16.7	10.1	10.1	85.8	85.8	85.8	500	NA	NA	500	500	6.6 – 8.6	NA	NA
Solid Waste Management Unit 1 Wells	NAPIS-1	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	NAPIS-2	12/17/20	3130	--	712 J-	--	--	408	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	03/09/21	760	1200	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	06/22/21	1400	2900	--	--	120	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	09/21/21	1700 J	5000	--	--	270	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-2	12/14/21	2000	340	--	--	120	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/17/20	1560	--	221 J-	--	--	154	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	03/09/21	290	230	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	06/22/21	520	590	--	--	91	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	09/21/21	620 J	970	--	--	140	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	NAPIS-3	12/14/21	760	410	--	--	94	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/17/20	24700	--	460	--	--	6410	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	03/09/21	6100	130 JB	--	--	2000	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	06/22/21	6200	360 JB	--	--	1400	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	09/21/21	7100 J	320	--	--	1700	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OAPIS-1	12/14/21	6500	500	--	--	950	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/20	811 J-	--	995	--	--	ND(140) R	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	03/12/21	260	3000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	06/24/21	420 JB	2400	--	--	ND(160)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	09/22/21	360	2700	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-59	12/23/21	370	2000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/11/20	ND(143)	--	ND(100)	--	--	ND(143)	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/15/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	03/02/21	ND(85)	30J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	06/09/21	49J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	09/30/21	75 JB	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	OW-60	12/07/21	66 JB	23J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/23/20	594	--	ND(100)	--	--	ND(139)	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	03/09/21	110	16J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	06/22/21	160 JB	32J/ND(50)U*	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	09/22/21	140	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-NW	12/14/21	170	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	STP1-SW	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	STP1-SW	1Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Solid Waste Management Unit 1 Wells	STP1-SW	2Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Solid Waste Management Unit 1 Wells	LDU - East	12/17/20	5240	--	1490	--	--	ND(148)	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	03/10/21	1300	2200	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	06/22/21	1400	1200	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	09/23/21	2800	1200	--	--	87 JB	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - East	12/17/21	2900	950	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/20	2860	--	444	--	--	ND(140)	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	03/10/21	1000	450	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	06/22/21	2500 J	1200 J	--	--	ND(400)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	09/23/21	1100	450	--	--	ND(140)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	LDU - West	12/17/21	1600	200	--	--	ND(81)	--	--	--	--	--	--	--	--	--
Solid Waste Management Unit 1 Wells	Oil Sump LDU	4Q2020	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S	NS - H2S
Solid Waste Management Unit 1 Wells	Oil Sump LDU	1Q2021 - 4Q2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Tank Farm Wells	OW-57	12/23/20	14800 J-	--	24900	--	--	375 J-	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	03/12/21	4500	28000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	06/23/21	3600	31000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	09/16/21	5000	36000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-57	12/14/21	4600	26000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/22/20	17400	--	64700	--	--	528	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	03/12/21	5300	85000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	06/23/21	5700	73000	--	--	ND(160)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	09/16/21	5300	86000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58	12/14/21	5600	58000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/23/20	12500 J-	--	22500	--	--	ND(146) R	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	03/12/21	2500	29000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	06/23/21	2400	23000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	09/16/21	3100	27000	--	--	ND(82)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-58A	12/14/21	3700	23000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-61	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-62	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	OW-63	12/11/20	5200	--	23000	--	--	ND(147)	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	03/03/21	1800	34000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	06/15/21	2600	32000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	09/29/21	2500	39000	--	--	ND(800)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-63	12/17/21	2900	28000	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	12/11/20	1770	--	591	--	--	ND(145)	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	03/03/21	280	1000	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	06/29/21	510	780	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	09/23/21	520	990	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-64	12/29/21	410	1100	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Tank Farm Wells	OW-65	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-1	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2	4Q2020 - 2Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-2R	3Q2021 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-5	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Tank Farm Wells	RW-6	4Q2020 - 4Q2021	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH	NS - SPH
Western Boundary Wells	BW-1A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1B	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-1C	09/13/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/12/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/20/20	ND(70)	--	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-1C	09/29/21	ND(120)	ND(50)	--	--	ND(150)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/13/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Biochemical Oxygen Demand (µg/L)	Bromide (µg/L)	Chemical Oxygen Demand (µg/L)	Chloride (µg/L)	Conductivity (µmhos/cm)	Cyanide, Total (µg/L)	Fluoride, Total (µg/L)	Nitrate & Nitrite (µg/L)	Nitrogen, Nitrate (µg/L)	Nitrogen, Nitrate & Nitrite (µg/L)	Nitrogen, Nitrite (µg/L)	Ortho-Phosphate (µg/L)	Ortho- Phosphorus (µg/L)	Sulfate (µg/L)
	Cleanup Levels		30,000	NA	125,000	250,000	NA	1.46	1,600	NA	10,000	10,000	1,000	NA	NA	600,000
Western Boundary Wells	BW-2A	09/12/18	--	430	--	38000	--	--	1000	ND(1000)	--	--	--	710	--	7300
Western Boundary Wells	BW-2A	08/14/19	--	460	--	38000	--	--	1100	--	ND(500)	--	ND(500)	--	ND(2500)	6800
Western Boundary Wells	BW-2A	09/20/20	--	500 J	--	39000	--	--	1200	--	100J/ND(500)U*	--	ND(500)	ND(2500)	--	7700
Western Boundary Wells	BW-2A	09/29/21	--	540	--	38000	--	--	1300	--	90J/ND(500)U*	--	78 J	ND(2500)	--	55000
Western Boundary Wells	BW-2B	09/13/17	--	730	--	29000	--	--	1500	--	ND(500)	--	ND(500)	ND(2500)	--	180000
Western Boundary Wells	BW-2B	09/12/18	--	740	--	31000	--	--	1700	--	ND(500)	--	ND(500)	ND(2500)	--	190000
Western Boundary Wells	BW-2B	08/14/19	--	710	--	31000	--	--	1500	--	65	--	68	--	ND(2500)	200000
Western Boundary Wells	BW-2B	09/21/20	--	620	--	29000	--	--	1600	--	630	--	ND(100)	ND(500)	--	170000
Western Boundary Wells	BW-2B	09/29/21	--	590	--	32000	--	--	1500	--	ND(100)	--	ND(100)	ND(500)	--	180000
Western Boundary Wells	BW-2C	09/13/17	--	130	--	44000	--	--	1800	--	110	--	ND(500)	ND(2500)	--	260000
Western Boundary Wells	BW-2C	09/18/18	--	140	--	48000	--	--	1700	400	--	--	--	910	--	270000
Western Boundary Wells	BW-2C	08/14/19	--	ND(500)	--	46000	--	--	1800	--	ND(500)	--	ND(500)	--	ND(2500)	260000
Western Boundary Wells	BW-2C	09/22/20	--	ND(500)	--	47000	--	--	1700	--	ND(500)	--	ND(500)	ND(2500)	--	260000
Western Boundary Wells	BW-2C	09/29/21	--	ND(500)	--	48000	--	--	1700	--	51J/ND(500)U*	--	ND(500)	ND(2500)	--	270000
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	--	440	--	29000	--	--	1400	--	ND(500)	--	ND(500)	ND(2500)	--	38000
Western Boundary Wells	BW-3B	09/12/18	--	450	--	31000	--	--	1300	--	63	--	ND(500)	1200	--	44000
Western Boundary Wells	BW-3B	08/14/19	--	410	--	31000	--	--	1400	--	ND(500)	--	ND(500)	--	ND(2500)	48000
Western Boundary Wells	BW-3B	09/21/20	--	420 J	--	30000	--	--	1200	--	ND(500)	--	ND(500)	1400 J	--	48000
Western Boundary Wells	BW-3B	09/29/21	--	450 J	--	31000	--	--	1400	--	64J/ND(500)U*	--	ND(500)	ND(2500)	--	46000
Western Boundary Wells	BW-3C	09/13/17	--	420	--	36000	--	--	1200	ND(1000)	--	--	--	ND(2500)	--	320000
Western Boundary Wells	BW-3C	09/18/18	--	180	--	38000	--	--	1300	--	61	--	ND(500)	850	--	320000
Western Boundary Wells	BW-3C	08/14/19	--	ND(500)	--	36000	--	--	1500	--	ND(500)	--	ND(500)	--	ND(2500)	330000
Western Boundary Wells	BW-3C	09/22/20	--	ND(500)	--	37000	--	--	1200	--	ND(500)	--	ND(500)	ND(2500)	--	330000
Western Boundary Wells	BW-3C	09/29/21	--	ND(500)	--	38000	--	--	1400	--	60J/ND(500)U*	--	ND(500)	ND(2500)	--	340000
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	03/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	06/10/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	--	320 J	--	60000	--	--	590	--	60J/ND(500)U*	--	ND(500)	ND(2500)	--	180000
Western Boundary Wells	BW-4B	12/08/21	--	ND(500)	--	58000	--	--	940	--	340J/ND(500)U*	--	ND(500)	ND(2500) R	--	160000
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	--	--	--	627000	--	--	ND(1000)	--	ND(100)	--	--	--	--	65600
Western Boundary Wells	BW-5B	03/03/21	--	650	--	670000	--	--	ND(100)	--	81J/ND(100)U*	--	ND(2000)	ND(500)	--	72000
Western Boundary Wells	BW-5B	06/29/21	--	710	--	710000	--	--	ND(500)	--	110J/ND(500)U*	--	ND(500)	ND(2500)	--	70000
Western Boundary Wells	BW-5B	09/23/21	--	730	--	730000	--	--	ND(500)	--	110J/ND(500)U*	--	ND(500)	ND(2500)	--	72000
Western Boundary Wells	BW-5B	12/08/21	--	500	--	660000	--	--	45 J	--	68J/ND(100)U*	--	ND(2000)	ND(500) R	--	61000
Western Boundary Wells	BW-5C	12/09/20	--	--	--	1800000	--	--	ND(1000)	--	ND(100)	--	--	--	--	327000 J
Western Boundary Wells	BW-5C	03/03/21	--	1300	--	1800000	--	--	ND(500)	--	ND(500)	--	ND(500)	ND(2500)	--	240000
Western Boundary Wells	BW-5C	06/29/21	--	1400	--	1900000	--	--	ND(500)	--	ND(500)	--	ND(500)	ND(2500)	--	240000
Western Boundary Wells	BW-5C	09/23/21	--	1400	--	1700000	--	--	ND(500)	--	94J/ND(500)U*	--	ND(500)	ND(2500)	--	250000
Western Boundary Wells	BW-5C	12/08/21	--	970	--	1700000	--	--	ND(500)	--	ND(500)	--	ND(500)	ND(2500) R	--	230000

TABLE 5-5. GENERAL CHEMISTRY AND TOTAL PETROLEUM HYDROCARBON ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	TPH (C6-C10) (µg/L)	Motor Oil (µg/L)	Oil Range Organics (µg/L)	TPH C28-C40 (µg/L)	Total Dissolved Solids (µg/L)	Solids, Total Suspended (µg/L)	Soluble Salt (µg/L)	Coliform, E-Coli (MPN/100ml)	E-Coli (MPN/100mL)	pH (Std Units)	Resistivity (Mohm/cm)	Temperature (°C)
	Cleanup Levels		16.7	10.1	10.1	85.8	85.8	85.8	500	NA	NA	500	500	6.6 – 8.6	NA	NA
Western Boundary Wells	BW-2A	09/12/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/20/20	ND(70) UJ	ND(50)	--	--	ND(600) UJ	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2A	09/29/21	38J/ND(150)U*	ND(50)	--	--	ND(180)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/13/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/12/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/21/20	ND(70) UJ	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2B	09/29/21	ND(130)	ND(50)	--	--	ND(160)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/13/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/18/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/22/20	ND(70)	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-2C	09/29/21	140J/ND(150)U*	ND(50)	--	--	ND(180)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-3B	09/13/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/12/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/21/20	ND(70) UJ	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3B	09/29/21	ND(140)	ND(50)	--	--	ND(170)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/13/17	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/18/18	ND(1000)	ND(50)	--	--	ND(5000)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	08/14/19	ND(1000)	ND(50)	--	ND(5000)	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/22/20	ND(70)	ND(50)	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-3C	09/29/21	ND(130)	ND(50)	--	--	ND(160)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-4B	12/28/20	--	--	ND(100)	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	03/10/21	--	17J/ND(50)U*	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	06/10/21	--	28J/ND(50)U*	--	--	--	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	09/29/21	43J/ND(120)U*	ND(50)	--	--	ND(150)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-4B	12/08/21	47 J	ND(50)	--	--	ND(180)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5A	2017 - 2021	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry	NS - Dry
Western Boundary Wells	BW-5B	12/11/20	ND(144)	--	ND(100)	--	--	ND(144)	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	03/03/21	ND(85)	25J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	06/29/21	26 J	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	09/23/21	20J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5B	12/08/21	47J/ND(64)U*	18 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/09/20	ND(132)	--	ND(100) UJ	--	--	ND(132)	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	03/03/21	ND(85)	28J/ND(50)U*	--	--	ND(600)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	06/29/21	57 J	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	09/23/21	54J/ND(64)U*	ND(50)	--	--	ND(80)	--	--	--	--	--	--	--	--	--
Western Boundary Wells	BW-5C	12/08/21	59 J	28 J	--	--	ND(80)	--	--	--	--	--	--	--	--	--

Notes:
-- = Not Measured
Mohm/cm = Megahms per centimeter
MPN/100ml = Most Probable Number per 100 milliliters
ND(x) = Not detected, where x = the reporting limit
NS - Dry = Not sampled due to dry well
NS - H2S = Not sampled due to presence of Hydrogen Sulfide
NS - RW = Not sampled due to recovery well in place
NS - SPH = Not sampled due to presence of Separate Phase Hydrocarbons
NS - UTA = Not sampled, unable to access location
Q = Quarter
Std Units = Standard Units
TPH = Total Petroleum Hydrocarbons
°C = degrees Celsius
< = greater than
> = less than
µg/L = micrograms per liter
µmhos/cm = micromhos per centimeter
Bolded detections and italicized non-detections exceeded the cleanup levels selected in Table 3-2.
Data prior to July 2019 was not validated and flags have not been applied.
D = Sample diluted due to matrix
H = Holding times for preparation or analysis exceeded
J = Estimated concentration
J- = Estimated concentration, possibly biased low
J+ = Estimated concentration, possibly biased high
JB = Estimated concentration due to blank contamination
R = Rejected, Data not usable
UJ = Estimated reporting limit
U = Evaluated to be undetected at the reported concentration
* = The first result represents the laboratory reported concentration. The second result was evaluated to be undetected at the reported concentration by the data validator. The result was determined to be a false positive.

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Deep Monitoring Wells	OW-01	03/02/21	1500	2.9	118.9	8.69	976	13.93
Deep Monitoring Wells		06/09/21	1490	3.43	288.6	8.73	968.5	19.3
Deep Monitoring Wells		09/28/21	1310	0.84	241	8.7	851.5	12.8
Deep Monitoring Wells		12/02/21	1310	1.66	193.6	8.77	85100	11.3
Deep Monitoring Wells	OW-10	03/12/21	4210	0.66	346.8	7.37	2741	11.6
Deep Monitoring Wells		06/09/21	6930	2.03	333.2	7.33	4594.4	15.2
Deep Monitoring Wells		09/22/21	5500	1.07	29.2	7.31	3636	14.2
Deep Monitoring Wells		12/07/21	3950	1.93	142	7.43	2765.5	11.4
Deep Monitoring Wells	OW-11	09/29/21	2570	1.29	110	8.38	1670.8	13.8
Deep Monitoring Wells	OW-12	09/29/21	1010	0.66	81.1	9.33	654.5	15.5
Deep Monitoring Wells	OW-13	03/01/21	1262	2.94	-141.6	7.98	819	12.06
Deep Monitoring Wells		06/08/21	1280	0.98	266.8	8.02	823	18.5
Deep Monitoring Wells		09/23/21	1080	0.93	153	8.04	707.5	13.3
Deep Monitoring Wells		12/06/21	1130	1.9	84.7	8.03	734.5	12
Eastern Boundary Wells	OW-12A	12/21/21	3.46	1.97	149.5	6.86	2260.5	12.5
Eastern Boundary Wells	OW-14	09/23/21	1470	2.06	-70.1	7.17	968	14.5
Eastern Boundary Wells		12/28/21	1380	2.97	10.5	7.08	922	8.8
Eastern Boundary Wells	OW-29	03/01/21	1967	3.13	178.4	7.08	1279	12.58
Eastern Boundary Wells		06/08/21	1990	2.56	277.8	7.14	1295.37	15.6
Eastern Boundary Wells		09/23/21	1780	0.85	90.6	7.21	1186	14.6
Eastern Boundary Wells		12/06/21	1770	1.84	96.9	7.11	1150.5	11.3
Eastern Boundary Wells	OW-30	09/23/21	1750	1.59	130.2	7.11	1137	13.9
Eastern Boundary Wells		12/28/21	1730	4.09	140.4	7.06	1124.5	9.3
Eastern Boundary Wells	OW-50	03/01/21	1200	2.72	93.2	7.63	782	11.9
Eastern Boundary Wells		06/08/21	1220	0.5	247.6	8.06	793	15.5
Eastern Boundary Wells		09/23/21	1060	0.36	165.2	8.15	689	14
Eastern Boundary Wells		12/06/21	1070	4.09	286.5	8.01	702.5	8.7
Eastern Boundary Wells	OW-52	03/01/21	1032	2.38	-105.7	7.94	671	12.78
Eastern Boundary Wells		06/08/21	602	0.88	397.8	8.25	659.9	15.3
Eastern Boundary Wells		09/23/21	890	0.45	165.8	8.17	585	13.1
Eastern Boundary Wells		12/06/21	930	1.37	268.1	8.11	604.5	10.4
Eastern Boundary Wells	OW-54	09/23/21	1660	1.78	-23	7.18	1077.5	15.3
Eastern Boundary Wells		12/28/21	1590	7.95	36.4	7.21	1033.5	7.6
Eastern Boundary Wells	OW-55	09/23/21	1710	0.52	-68.8	6.96	1133	14.4
Eastern Boundary Wells		12/28/21	1750	2.93	-18.4	7.13	1132.5	10
Eastern Boundary Wells	OW-56	03/08/21	2712	45.5	766.5	7.85	1763.8	8.15
Eastern Boundary Wells		06/21/21	2420	2.4	187.9	7.24	157.3	15.4

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Eastern Boundary Wells	OW-56	09/23/21	2310	1.56	81.8	7.13	1538	13.5
Eastern Boundary Wells		12/22/21	2230	6.68	150.8	7.23	1449.5	10.9
Eastern Boundary Wells	OW-66	09/02/21	2260	1.07	-14.6	6.86	1462.5	15.4
Eastern Boundary Wells		12/06/21	2200	1.95	18	6.95	1430	12
Eastern Boundary Wells	OW-70	09/08/21	1240	2.1	190.4	7.71	777	14.4
Eastern Boundary Wells		12/21/21	1170	2.48	167.9	7.6	765.5	11
Evaporation Ponds	EP-2	06/21/21	1326	0.26	74.8	7.95	8794.5	20
Evaporation Ponds		12/14/21	13410	5.9	215.9	7.66	8717	3.8
Evaporation Ponds	EP-3	06/21/21	1020	0.86	240.4	7.41	66299	21.5
Evaporation Ponds	EP-4	06/21/21	7610	0.34	68.3	7.44	49465	19.9
Evaporation Ponds	EP-5	06/21/21	2835	2.91	193.9	7.49	18427	22.1
Evaporation Ponds		12/15/21	126900	1.81	261.5	6.78	82550	3.4
Evaporation Ponds	EP-6	06/21/21	3598	3.06	190.7	7.46	23374	21.9
Evaporation Ponds		12/15/21	24180	2.4	287.9	7.51	15717	2.4
Evaporation Ponds	EP-8	12/28/21	181700	1.52	308.5	7	118105	1.9
Evaporation Ponds	EP-9	06/21/21	3040	0.97	230.6	7.21	20654	22.8
Evaporation Ponds		12/21/21	246800	2.54	261.3	7.08	160550	7.7
Evaporation Ponds	EP-12B	06/21/21	6800	2.3	160.3	7.67	44135	23
Evaporation Ponds	STP-1 to EP-2	06/29/21	311	5.89	91.5	7.81	201.15	16
Evaporation Ponds		09/08/21	3100	0.64	116.6	8.17	2016.5	13.6
Evaporation Ponds		12/15/21	3230	4.05	215.2	8.27	2106	2.5
Land Treatment Unit Wells	MW-1	09/28/21	1000	3.84	230.2	9.07	1208	13.4
Land Treatment Unit Wells	MW-2	09/16/21	1010	1.23	198.5	9.01	655	13.8
Land Treatment Unit Wells	MW-4	09/16/21	1022	2.12	147.3	8.58	667	13.9
Land Treatment Unit Wells	MW-5	09/28/21	1010	0.74	222.6	9.12	649.5	14.5
Land Treatment Unit Wells	SMW-2	09/29/21	1050	3.51	232.2	7.18	6849	13
Land Treatment Unit Wells	SMW-4	09/28/21	1090	2.04	229.3	8.6	708	13.6
Land Treatment Unit Wells	OW-67	09/02/21	15560	1.61	159.4	6.6	10107	16.9
Land Treatment Unit Wells		12/22/21	13700	3.95	198.3	6.61	8830.5	11.1
Land Treatment Unit Wells	OW-68	09/02/21	14390	2.16	-9.2	6.91	9453	14.2
Land Treatment Unit Wells		12/22/21	13690	1.78	49.8	6.83	8897.5	11.8
Marketing Tank Farm Wells	MKTF-01R	08/31/21	4090	1.43	-41.8	6.8	2658.5	20.1
Marketing Tank Farm Wells		12/21/21	3760	2.65	4.9	6.9	2450.5	12.2
Marketing Tank Farm Wells	MKTF-02	03/09/21	10130	1.93	273.7	6.95	6587	9.63
Marketing Tank Farm Wells		06/16/21	6470	3.98	171.8	7.01	6389	14.9
Marketing Tank Farm Wells	MKTF-02R	08/31/21	6080	5.7	110.1	7.04	3952	14.1
Marketing Tank Farm Wells		12/15/21	6030	0.59	215.6	7.46	3919	10.6

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Marketing Tank Farm Wells	MKTF-04R	08/30/21	1730	1.96	-25.8	6.84	1124.5	16.1
Marketing Tank Farm Wells		12/21/21	1660	2.12	125	6.9	1081	13.8
Marketing Tank Farm Wells	MKTF-10	03/09/21	3830	2.43	274.3	6.9	2494	9.48
Marketing Tank Farm Wells		06/22/21	3960	1.08	23.1	6.75	2574	15.9
Marketing Tank Farm Wells		09/14/21	4260	1.08	-2.3	6.68	2769	19.3
Marketing Tank Farm Wells		12/15/21	2970	2.82	56.5	6.91	1844	12.9
Marketing Tank Farm Wells	MKTF-11	03/09/21	6430	2.82	273.3	6.9	4187	10.15
Marketing Tank Farm Wells		06/16/21	5860	1.87	39.2	7.01	3864	15.9
Marketing Tank Farm Wells		09/14/21	6440	1.05	-9.3	6.86	4186	21.3
Marketing Tank Farm Wells		12/15/21	5700	6.84	121.8	7.01	3621	12.4
Marketing Tank Farm Wells	MKTF-16	03/10/21	2770	1.11	61.6	6.82	1842	12.2
Marketing Tank Farm Wells		09/21/21	1900	0.7	-55.9	6.8	944	18.9
Marketing Tank Farm Wells		12/21/21	528	7.93	304.2	6.75	343.2	8.5
Marketing Tank Farm Wells	MKTF-17R	08/30/21	1570	1.89	132.2	6.96	1020.5	16.6
Marketing Tank Farm Wells		12/20/21	1610	6.7	197.5	7.05	1046.5	13.6
Marketing Tank Farm Wells	MKTF-18	03/10/21	1840	3	233.9	7.16	1196	10.9
Marketing Tank Farm Wells		06/22/21	1940	1.66	89.9	7.14	1261	16.2
Marketing Tank Farm Wells	MKTF-18R	08/30/21	1690	0.78	-14.7	6.79	1098.5	18.2
Marketing Tank Farm Wells		12/20/21	1790	2.99	36.8	6.77	1162.5	13
Marketing Tank Farm Wells	MKTF-21	03/10/21	1490	1.3	31.5	7.11	942.5	11.7
Marketing Tank Farm Wells	MKTF-24	03/08/21	4207	6.5	242.5	7.06	2735	10.5
Marketing Tank Farm Wells		06/15/21	4380	3.67	154.9	7	2847	13.9
Marketing Tank Farm Wells		09/20/21	3910	2.09	143.6	6.86	2541.5	13.8
Marketing Tank Farm Wells		12/15/21	2210	0.5	241.6	6.93	1508	11.4
Marketing Tank Farm Wells	MKTF-25	02/27/21	3561	2.164	292.4	6.96	2367	10.36
Marketing Tank Farm Wells		06/16/21	3580	2.48	185	7.17	2327	15.7
Marketing Tank Farm Wells		09/20/21	3170	3.17	196.5	7.05	2060	14.4
Marketing Tank Farm Wells		12/16/21	3060	2.96	268.4	7.09	1989	12.3
Marketing Tank Farm Wells		03/04/22	3560	2.16	292.4	6.96	2367	10.36
Marketing Tank Farm Wells	MKTF-27	02/28/21	11430	2.46	291.7	7.06	7426	9.2
Marketing Tank Farm Wells		06/15/21	8330	4.41	224.7	7.18	5440	14.8
Marketing Tank Farm Wells		09/14/21	8210	1.11	76.1	6.87	5343	17.3
Marketing Tank Farm Wells		12/13/21	7000	1.48	212.9	7.29	4595	13.1
Marketing Tank Farm Wells		03/04/22	11430	24.6	291.7	7.06	7426	9.2
Marketing Tank Farm Wells	MKTF-28	02/28/21	3340	8.12	269.7	7.35	2220	10.3
Marketing Tank Farm Wells		06/15/21	3240	1.35	281.9	7.38	2098	16.4
Marketing Tank Farm Wells		09/14/21	3780	1.35	72.1	7.12	2475	19.2

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Marketing Tank Farm Wells	MKTF-28	12/13/21	3430	1.9	169.8	7.14	2187	15.5
Marketing Tank Farm Wells		03/04/22	3340	8.12	269.7	7.35	2220	10.3
Marketing Tank Farm Wells	MKTF-29	03/08/21	6320	0.3	100.3	6.98	4111	12.2
Marketing Tank Farm Wells		06/14/21	6110	3.24	245	6.68	3978	14
Marketing Tank Farm Wells		09/14/21	6020	2.91	184	6.84	3813	17.1
Marketing Tank Farm Wells		12/13/21	5660	2.08	161	6.78	3619	13.1
Marketing Tank Farm Wells	MKTF-30	03/08/21	3920	3.14	260.8	7.68	2614	11.1
Marketing Tank Farm Wells		06/14/21	4140	4.18	211.4	7.33	2691	14.9
Marketing Tank Farm Wells		09/14/21	4830	3.65	180.7	7.28	2939	16
Marketing Tank Farm Wells		12/13/21	3560	1.87	258.6	7.24	2314	13
Marketing Tank Farm Wells	MKTF-31	02/27/21	2718	6.79	270.2	6.9	1766	7.91
Marketing Tank Farm Wells		06/16/21	2530	2.83	282.2	7.2	1641	15
Marketing Tank Farm Wells		09/15/21	2820	1.66	70.6	6.94	1833.5	20.2
Marketing Tank Farm Wells		12/15/21	2350	0.8	242.1	7.1	1488	12.6
Marketing Tank Farm Wells		03/04/22	2720	6.79	270.2	6.9	1766	7.91
Marketing Tank Farm Wells	MKTF-32	06/14/21	2490	1.4	286	7.74	1624	14.4
Marketing Tank Farm Wells		09/13/21	2310	1.83	188.7	7.64	1501	15.5
Marketing Tank Farm Wells		12/08/21	2200	2.16	314.4	7.77	1436.5	13.8
Marketing Tank Farm Wells	MKTF-34	06/23/21	2070	2.05	245.4	7.29	1332	14
Marketing Tank Farm Wells		09/13/21	2080	1.26	189	7.08	1352	16.2
Marketing Tank Farm Wells		12/08/21	1830	2.88	319.3	7.07	1187.5	13.2
Marketing Tank Farm Wells	MKTF-35	03/10/21	2010	2.47	65.7	6.92	1336	11.8
Marketing Tank Farm Wells		06/22/21	2050	1.32	-85.1	7.09	1332	17.3
Marketing Tank Farm Wells		09/13/21	2260	1.4	-50.5	7.35	1530	21.5
Marketing Tank Farm Wells		12/20/21	2190	2.02	-45.4	6.91	1423.5	14.1
Marketing Tank Farm Wells	MKTF-36	06/22/21	1820	0.34	-18.7	6.73	1183	19.6
Marketing Tank Farm Wells	MKTF-38	03/10/21	2655	0.46	269.1	8.01	1719	11.7
Marketing Tank Farm Wells		06/22/21	2280	1.59	187.3	7.07	1486	16.8
Marketing Tank Farm Wells		09/21/21	1810	2.83	263.3	7.24	1176.5	16.9
Marketing Tank Farm Wells		12/20/21	1780	4.42	165.3	7.21	1158.5	13.3
Marketing Tank Farm Wells	MKTF-40	02/28/21	11580	9.67	269.5	7.13	7533	9.64
Marketing Tank Farm Wells		06/16/21	9940	5.98	261.6	7.24	7210	16.8
Marketing Tank Farm Wells		09/20/21	10760	3.31	180.9	6.97	6987.5	15.6
Marketing Tank Farm Wells		12/16/21	10500	1.92	196.8	6.98	6777	13.8
Marketing Tank Farm Wells		03/04/22	11580	9.67	269.5	7.13	7533	9.64
Marketing Tank Farm Wells	MKTF-41	03/03/21	2860	4.26	123.8	8.06	1844	14.9
Marketing Tank Farm Wells		06/14/21	3080	1.27	308.7	8.1	2002	16.1

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Marketing Tank Farm Wells	MKTF-41	09/13/21	3090	1.86	76.7	8.26	2122	16.4
Marketing Tank Farm Wells		12/08/21	2690	0.94	318.1	8.01	1748	12.6
Marketing Tank Farm Wells	MKTF-42	03/03/21	3450	3.66	126.5	7.8	2245	12
Marketing Tank Farm Wells		06/14/21	3440	1.61	244.4	7.95	2218	14.8
Marketing Tank Farm Wells		09/13/21	3420	1.24	145.5	7.93	2223	14.5
Marketing Tank Farm Wells		12/08/21	3010	1.66	309.2	7.79	1156	12.1
Marketing Tank Farm Wells	MKTF-43	03/03/21	20920	0.28	130.4	6.79	13600	9.6
Marketing Tank Farm Wells		06/23/21	26020	1.29	232.8	6.75	17004	13.4
Marketing Tank Farm Wells		09/22/21	37500	1.03	12.5	6.56	24388	17.6
Marketing Tank Farm Wells		12/07/21	319200	1.8	133.7	6.49	2069	12.4
Marketing Tank Farm Wells	MKTF-44	03/10/21	2040	1.22	268.7	8.08	1351	10.8
Marketing Tank Farm Wells		06/23/21	1820	4.93	189.2	7.86	1170	14.3
Marketing Tank Farm Wells		09/21/21	3409	5.05	339.7	7.91	2865	13.08
Marketing Tank Farm Wells		09/29/21	1690	4.55	170.2	8.2	1115	12.8
Marketing Tank Farm Wells		12/22/21	1600	8.76	146.1	8.21	1040	11.4
Marketing Tank Farm Wells	MKTF-46	03/03/21	2730	3.5	140.9	7.14	1775	10.9
Marketing Tank Farm Wells		06/15/21	2340	2.95	268.2	7.26	1515	14.3
Marketing Tank Farm Wells		09/13/21	2330	1.57	33.2	6.99	1515.5	17.9
Marketing Tank Farm Wells		12/08/21	2060	1.02	297.6	6.91	1350.5	14.1
Marketing Tank Farm Wells	MKTF-47	03/10/21	2160	4.89	210.8	7.4	1404	12.2
Marketing Tank Farm Wells	MKTF-49	03/08/21	6228	2.48	248.2	6.92	4047	13.4
Marketing Tank Farm Wells	MKTF-50	03/08/21	3774	1.26	110.1	7.11	2377	15.4
Production Wells	PW-3	09/17/21	1370	3.24	155	7.45	890	18.1
Production Wells		12/16/21	1330	2.46	77.1	7.4	871	20.7
Production Wells	PW-4	09/17/21	1100	3.43	96.4	7.23	721.5	20
Production Wells		12/28/21	1810	2.5	90.2	7.1	932	10
Solid Waste Management Unit 1 Wells	OW-59	03/11/21	3920	1.45	185.8	7.34	10340	12.7
Solid Waste Management Unit 1 Wells		06/23/21	10770	1.34	252.2	7.3	6994	15
Solid Waste Management Unit 1 Wells		09/21/21	9990	0.83	209.1	7.45	6493	14.04
Solid Waste Management Unit 1 Wells		12/22/21	9900	3.98	124.8	7.33	6560.5	11.8
Solid Waste Management Unit 1 Wells	OW-60	03/01/21	6916	6.06	109.6	7.51	4496	13.3
Solid Waste Management Unit 1 Wells		06/08/21	7050	4.38	361.8	7.52	4602	19.2
Solid Waste Management Unit 1 Wells		09/21/21	5930	4.11	171.6	7.58	3820	13.1
Solid Waste Management Unit 1 Wells		12/06/21	6200	4.71	162	7.41	4050	11.9
Solid Waste Management Unit 1 Wells	NAPIS-1	06/22/21	1830	1.46	-45.2	7.1	1189.5	19.1
Solid Waste Management Unit 1 Wells	NAPIS-2	03/08/21	1577	21.43	249.4	7.22	1029	14.73
Solid Waste Management Unit 1 Wells		06/23/21	1700	1.75	40.5	7.06	1105	17.8

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Solid Waste Management Unit 1 Wells	NAPIS-2	09/20/21	1750	0.84	-75.5	7.06	1137.8	18.9
Solid Waste Management Unit 1 Wells		12/13/21	980	1.02	15.4	7.06	619	16.9
Solid Waste Management Unit 1 Wells	NAPIS-3	03/08/21	2177	6.91	120.8	7.09	1458	20.1
Solid Waste Management Unit 1 Wells		06/21/21	2180	0.92	-21.3	7.18	1411	17.8
Solid Waste Management Unit 1 Wells		09/20/21	2070	1.33	-52.8	7.07	1348	18.2
Solid Waste Management Unit 1 Wells		12/13/21	2090	1.51	-38.9	7.04	1342	16.8
Solid Waste Management Unit 1 Wells	KA-3	03/08/21	2421	8.08	242.8	7.42	1578	13.5
Solid Waste Management Unit 1 Wells		06/21/21	2190	1.03	186.6	7.33	1423	19
Solid Waste Management Unit 1 Wells		09/20/21	2160	1.37	185.6	7.32	1404	19.2
Solid Waste Management Unit 1 Wells		12/13/21	1170	1.22	168.9	7.23	760	15.2
Solid Waste Management Unit 1 Wells	OAPIS-1	03/08/21	6036	7.15	242	7.19	3923	11.4
Solid Waste Management Unit 1 Wells		06/21/21	5620	0.84	-24.1	7.09	3689	17.7
Solid Waste Management Unit 1 Wells		09/20/21	5230	1.07	-34.7	7.01	3399	16.3
Solid Waste Management Unit 1 Wells		12/13/21	4990	1.34	238.9	7.19	3243	15
Solid Waste Management Unit 1 Wells	STP1-NW	03/08/21	7577	9.42	113.3	7.67	4911	13
Solid Waste Management Unit 1 Wells		06/21/21	7730	3.15	205.1	7.44	4573	13.8
Solid Waste Management Unit 1 Wells		09/21/21	6510	2.98	157.5	7.71	4231.5	16.8
Solid Waste Management Unit 1 Wells		12/13/21	6370	2.53	121.2	7.64	4144	15
Tank Farm Wells	OW-57	03/11/21	1630	1.07	168.7	7.15	1040	12.6
Tank Farm Wells		06/22/21	1630	1.51	40	7.05	1059	14.3
Tank Farm Wells		09/15/21	1460	1.44	-12	6.88	926	14.8
Tank Farm Wells		12/13/21	1380	1.62	-39.7	7.06	897	13.2
Tank Farm Wells	OW-58	03/11/21	1040	2.07	116.7	6.85	665	13.8
Tank Farm Wells		06/22/21	1870	3.46	24.8	6.86	1145.5	15.4
Tank Farm Wells		09/15/21	2170	1.39	-48.7	6.76	1410.5	16.5
Tank Farm Wells		12/13/21	1770	1.51	-61.5	6.82	1150.5	14.8
Tank Farm Wells	OW-58A	03/11/21	2260	1.01	171.2	7.23	1469	14.8
Tank Farm Wells		06/22/21	1260	1.03	38.8	7.13	768	18.4
Tank Farm Wells		09/15/21	2070	1.71	-40.1	6.96	1355.5	16.2
Tank Farm Wells		12/13/21	2040	0.87	99.8	7.14	1326	12.7
Tank Farm Wells	OW-63	03/01/21	1556	3.98	154.6	6.96	1011	12.12
Tank Farm Wells		06/14/21	1530	1.99	39.1	6.92	972.1	15
Tank Farm Wells		09/28/21	1330	0.93	-83.3	6.94	859	14.7
Tank Farm Wells		12/16/21	1370	0.8	53.4	7.01	951.8	13.7
Tank Farm Wells	OW-64	03/02/21	1797	4.72	98.3	7.48	1168	10.8
Tank Farm Wells		06/28/21	1850	3	104.2	7.56	1202	15.8
Tank Farm Wells		09/22/21	1640	2.84	228.1	7.63	1164.5	14.6

TABLE 5-6. FIELD PARAMETERS (2021)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH (Std Units)	Solids, Total Dissolved (mg/L)	Temperature (oC)
Tank Farm Wells	OW-64	12/28/21	1490	3.71	-6.8	7.7	980	8.9
Western Boundary Wells	BW-1C	09/28/21	1210	2.36	221	8.78	778	14.3
Western Boundary Wells	BW-2A	09/28/21	1200	1.09	81.8	7.78	801	12.7
Western Boundary Wells	BW-2B	09/28/21	1920	1.57	227.7	7.82	1238	12.6
Western Boundary Wells	BW-2C	09/28/21	1200	2.68	242.7	8.97	780	13.2
Western Boundary Wells	BW-3B	09/28/21	1330	3.91	185.5	8.15	855	13.3
Western Boundary Wells	BW-3C	09/28/21	1350	2.41	211.1	8.55	884	13.8
Western Boundary Wells	BW-4B	03/02/21	1585	1.61	268	7.79	1030	9.22
Western Boundary Wells		09/28/21	1470	1.91	248	8.28	955	12.9
Western Boundary Wells	BW-5B	06/28/21	2760	3.31	248	8.43	1794	13
Western Boundary Wells		09/22/21	2500	3.97	227.2	8.43	1625	16.3
Western Boundary Wells	BW-5C	06/28/21	5950	5.26	361	7.43	3919	13.3
Western Boundary Wells		09/23/21	5570	1.28	36.2	7.43	3630	13.5

Notes:

oC = Degrees Celsius

ID = identification

mg/L = Milligrams per liter

umhos/cm = Micromhos per centimeter

mV = Millivolts

Std = Standard

ORP - Oxidation Reduction Potential

TABLE 5-7. PFAS ANALYTICAL DATA
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Location Group Name	Location ID	Date Sampled	Perfluorobutanoic acid (PFBA) (ng/L)	Perfluoropentanoic acid (PFPeA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	4:2 Fluorotelomer sulfonic acid (4:2 FTS) (ng/L)	Perfluorohexanoic acid (PFHxA) (ng/L)	Perfluoropentanesulfonic acid (PFPeS) (ng/L)	Perfluoroheptanoic acid (PFHpA) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	6:2 Fluorotelomer sulfonic acid (6:2 FTS) (ng/L)
Tank Farm Wells	OW-63	06/15/21	ND(1.95)	352	38.4	ND(1.95)	355	44.5	137	325	400
Tank Farm Wells	OW-63	09/29/21	91.2	417	39.2	ND(2.04)	313	37.9	131	278	494
Tank Farm Wells	OW-63	12/17/21	153	464	34.2	ND(1.96)	347	37.4	114	237	638

Location Group Name	Location ID	Date Sampled	Perfluorooctanoic acid (PFOA) (ng/L)	Perfluoroheptanesulfonic acid (PFHpS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonamide (PFOSA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorodecanoic acid (PFDA) (ng/L)	8:2 Fluorotelomer sulfonic acid (8:2 FTS) (ng/L)	Perfluorononanesulfonic acid (PFNS) (ng/L)	2-(N-methyl-perfluorooctane sulfonamido) acetic acid (MeFOSAA) (ng/L)
Tank Farm Wells	OW-63	06/15/21	127	12.4	522	ND(1.95)	547	12.8	46.1	ND(1.95)	ND(1.95)
Tank Farm Wells	OW-63	09/29/21	123	11.9	494	ND(2.04)	516	12.4	44.6	ND(2.04)	ND(2.04)
Tank Farm Wells	OW-63	12/17/21	106	9.26	508	ND(1.96)	454	11.5	51.1	ND(1.96)	ND(1.96)

Location Group Name	Location ID	Date Sampled	2-(N-ethyl-perfluorooctane sulfonamido) acetic acid (EtFOSAA) (ng/L)	Perfluoroundecanoic acid (PFUnA) (ng/L)	Perfluorodecanesulfonic acid (PFDS) (ng/L)	Perfluorododecanoic acid (PFDoA) (ng/L)	Perfluorotridecanoic acid (PFTrDA) (ng/L)	Perfluorotetradecanoic acid (PFTeDA) (ng/L)	Total PFOA, PFOS, PFHxS (ng/L)
Health Advisory Level									70
Tank Farm Wells	OW-63	06/15/21	ND(2.56)	82.3	ND(2.69)	ND(1.95)	ND(1.95)	ND(1.95)	999.00
Tank Farm Wells	OW-63	09/29/21	ND(2.68)	88.2	ND(2.81)	ND(2.04)	ND(2.04)	ND(2.04)	917.00
Tank Farm Wells	OW-63	12/17/21	ND(1.96)	86.6	ND(1.96)	ND(1.96)	ND(1.96)	ND(1.96)	797.00

Notes:
ND(x) = Not detected, where x = the reporting limit
ng/L = nanograms per liter
PFAS = Per- and Polyfluoroalkyl Substances
PFOA = Perfluorooctanoic acid
PFOS = Perfluorooctane sulfonic acid
EPA = Environmental Protection Agency
Bolded detections = Total PFAS concentration exceeded the Health Advisory provided by EPA in the "Drinking Water Health Advisories for PFOA and PFOS" available at: <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>

TABLE 6-1. STANDPIPES AND RETENTION DITCH RECOVERY DATA - 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Standpipes Recovery Records			
Date	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Total Fluid Pumped (gal)
1/28/2021	0	4,500	4,500
2/22/2021	0	4,500	4,500
3/31/2021	0	4,000	4,000
1st Qtr Totals	0	13,000	13,000
4/22/2021	0	5,400	5,400
5/12/2021	0	4,800	4,800
6/7/2021	0	4,500	4,500
2nd Qtr Totals	0	14,700	14,700
7/13/2021	0	4,500	4,500
8/5/2021	0	4,800	4,800
9/13/2021	0	4,800	4,800
3rd Qtr Totals	0	14,100	14,100
10/6/2021	0	5,000	5,000
11/17/2021	0	4,600	4,600
12/13/2021	0	4,050	4,050
4th Qtr Totals	0	13,650	13,650
2021 Totals	0	55,450	55,450

Retention Ditch			
Date	Truck Loads	Water/Oil Mixture (gal)	Oil (gal)
1st Qtr 2021	Dry	0	0
2nd Qtr 2021	Dry	0	0
3rd Qtr 2021	Dry	0	0
4th Qtr 2021	Dry	0	0
2021 Total	Dry	0	0

Notes:

gal = gallons

Qtr = Quarter

TABLE 6-2. SUMP RECOVERY DATA - 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Sumps Recovery Records										
	S-1		S-2		S-3		S-4		S-5	
Date ¹	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)
May 2021 Totals	143.92	46.61	120.98	75.40	83.31	78.86	0.00	112.53	0.00	147.52
June 2021 Totals	211.55	110.44	203.67	134.95	137.12	138.98	0.00	188.30	0.00	258.07
2nd Qtr Totals	355.47	157.05	324.65	210.35	220.43	217.83	0.00	300.83	0.00	405.59
July 2021 Totals	155.51	55.78	135.29	82.97	94.45	82.94	0.00	119.01	0.00	164.45
August 2021 Totals	197.67	88.74	160.40	133.15	124.61	117.16	0.00	164.42	0.00	224.23
September 2021 Totals	178.28	65.58	136.58	111.87	106.16	97.85	0.23	137.03	0.03	190.56
3 Qtr Totals	531.46	210.09	432.26	327.99	325.22	297.94	0.23	420.47	0.03	579.24
October 2021 Totals	156.85	56.92	130.21	90.08	89.25	89.82	0.66	122.41	0.06	169.25
November 2021 Totals	197.44	84.94	170.99	122.78	110.30	127.89	13.85	155.71	0.00	229.17
December 2021 Totals	144.20	66.26	125.52	94.08	76.91	100.82	15.31	114.76	0.00	173.28
4th Qtr Totals	498.50	208.12	426.72	306.94	276.47	318.54	29.82	392.88	0.06	571.70
2021 Totals	1,385.42	575.27	1,183.64	845.28	822.12	834.31	30.05	1,114.18	0.09	1,556.52

Notes:

¹Sumps were installed in May 2021.

gal = gallons

Qtr = Quarter

TABLE 6-3. WELL RECOVERY DATA - 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

	Monitoring Well Recovery											
Date	MKTf-5		MKTf-6		MKTf-7		MKTf-8		MKTf-13		MKTf-14	
	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)
1/14/2021	0.14	2.00	1.18	3.06	0.65	2.04	0.23	5.07	3.06	3.58	0.40	7.26
3/31/2021	0.85	1.61	0.59	3.91	0.15	2.98	0.15	5.55	0.00	16.38	0.30	8.08
1st Qtr Totals	0.99	3.61	1.77	6.98	0.80	5.02	0.38	10.62	3.06	19.96	0.70	15.34
4/21/2021	0.06	2.09	0.32	3.91	0.10	3.08	0.13	5.45	2.78	3.96	0.10	7.63
5/3/2021	0.05	2.04	0.30	3.85	0.06	3.12	0.13	5.39	2.32	4.19	0.01	7.55
6/1/2021	0.07	1.81	0.36	3.61	0.09	2.89	0.32	5.00	2.63	3.69	0.30	7.08
2nd Qtr Totals	0.18	5.94	0.98	11.37	0.25	9.09	0.58	15.84	7.73	11.84	0.41	22.26
7/6/2021	0.19	1.59	0.39	3.49	0.25	2.77	0.27	4.94	2.70	3.43	0.32	6.85
8/2/2021	0.54	1.91	NM	NM	0.34	2.65	0.12	5.11	3.24	3.66	0.35	7.74
9/7/2021	0.79	1.84	NM	NM	0.31	2.78	0.16	5.19	2.66	4.09	0.13	7.50
3rd Qtr Totals	1.52	5.34	0.39	3.49	0.90	8.20	0.55	15.24	8.61	11.18	0.79	22.09
10/11/2021	0.67	2.46	NM	NM	0.07	3.12	0.09	5.28	2.92	4.47	0.19	8.13
11/2/2021	0.41	2.23	NM	NM	0.14	2.80	0.36	5.02	2.10	4.57	0.00	7.63
12/6/2021	0.36	1.89	NM	NM	0.10	2.51	0.26	4.85	1.74	4.65	0.14	7.34
4th Qtr Totals	1.45	6.58	0.00	0.00	0.31	8.43	0.70	15.15	6.76	13.69	0.33	23.10
2021 Totals	4.14	21.47	3.13	21.84	2.26	30.74	2.21	56.85	26.16	56.67	2.23	82.79

Notes:
gal = gallons
NM = not measured
Qtr = quarter

TABLE 6-3. WELL RECOVERY DATA - 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

	Monitoring Well Recovery											
Date	MKTf-17		MKTf-20		MKTf-22		MKTf-26		MKTf-33		MKTf-39	
	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)
1/14/2021	0.03	2.08	0.45	0.01	0.28	1.28	0.04	1.25	0.55	1.17	NM	NM
3/31/2021	0.00	2.10	0.21	0.27	0.41	1.20	0.01	1.31	0.11	1.52	NM	NM
1st Qtr Totals	0.03	4.19	0.66	0.28	0.69	2.49	0.05	2.56	0.66	2.70	0.00	0.00
4/21/2021	0.00	2.08	0.53	0.00	0.31	1.26	0.02	1.30	0.06	1.58	0.64	14.76
5/3/2021	0.00	2.06	0.26	0.00	0.31	1.25	0.02	1.26	0.04	1.59	0.50	14.72
6/1/2021	0.00	2.00	0.00	0.50	0.41	1.15	0.02	1.26	0.41	1.55	0.20	3.11
2nd Qtr Totals	0.00	6.14	0.79	0.50	1.03	3.66	0.06	3.82	0.51	4.72	1.34	32.59
7/6/2021	0.00	1.97	0.00	0.00	0.48	1.06	0.00	1.23	0.01	1.59	0.92	13.92
8/2/2021	0.00	1.98	0.00	0.51	0.38	1.19	0.00	1.31	0.02	1.57	0.52	15.11
9/7/2021	0.00	1.91	0.00	0.00	0.32	1.22	0.00	1.28	0.03	1.55	0.07	3.36
3rd Qtr Totals	0.01	5.86	0.00	0.51	1.18	3.47	0.01	3.82	0.05	4.71	1.51	32.39
10/11/2021	0.00	2.06	0.00	0.93	0.33	1.25	0.00	1.31	0.01	1.60	0.23	15.15
11/2/2021	0.00	2.08	0.00	0.53	0.33	1.22	0.00	1.31	0.00	1.59	0.26	14.90
12/6/2021	0.00	2.00	0.00	0.22	0.36	1.18	0.00	1.30	0.03	1.57	0.05	3.28
4th Qtr Totals	0.00	6.14	0.00	1.68	1.03	3.65	0.00	3.92	0.03	4.76	0.54	33.33
2021 Totals	0.04	22.32	1.45	2.97	3.93	13.27	0.12	14.12	1.26	16.89	3.39	98.31

Notes:
gal = gallons
NM = not measured
Qtr = quarter

TABLE 6-3. WELL RECOVERY DATA - 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

	Monitoring Well Recovery											
Date	MKTf-45		MKTf-49		OW-61		OW-65		RW-1		RW-2	
	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)
1/14/2021	0.12	12.43	NM	NM	0.95	5.80	5.38	2.60	1.59	9.01	0.00	13.25
3/31/2021	0.15	10.83	NM	NM	2.24	4.58	1.93	5.39	1.59	9.01	0.01	13.39
1st Qtr Totals	0.27	23.27	0.00	0.00	3.19	10.38	7.31	7.99	3.18	18.02	0.01	26.64
4/21/2021	0.03	12.33	NM	NM	1.10	5.48	5.36	1.90	0.64	9.45	0.00	12.73
5/3/2021	0.01	12.26	NM	NM	1.20	5.17	4.72	2.15	0.58	9.37	0.00	12.05
6/1/2021	0.01	11.87	NM	NM	2.94	3.70	4.59	2.22	0.58	8.76	0.00	11.84
2nd Qtr Totals	0.05	36.46	0.00	0.00	5.24	14.35	14.67	6.27	1.80	27.58	0.00	36.62
7/6/2021	0.00	11.70	NM	NM	3.43	2.78	4.82	1.64	1.70	8.27	0.00	12.73
8/2/2021	0.02	11.67	0.16	1.32	2.52	3.49	2.97	3.49	0.76	8.89	0.00	11.32
9/7/2021	0.02	11.68	0.17	1.37	2.53	3.12	4.54	1.85	1.10	8.89	NM	NM
3rd Qtr Totals	0.03	35.05	0.33	2.69	8.47	9.39	12.32	6.98	3.56	26.05	0.00	24.05
10/11/2021	0.00	11.85	0.29	4.36	2.89	2.28	5.07	1.57	0.97	8.52	NM	NM
11/2/2021	0.00	11.90	0.04	0.96	0.47	4.15	5.14	1.38	0.85	8.87	NM	NM
12/6/2021	0.02	11.98	0.04	0.97	0.26	3.92	4.97	1.31	1.56	8.37	NM	NM
4th Qtr Totals	0.02	35.73	0.37	6.29	3.62	10.35	15.19	4.26	3.38	25.76	0.00	0.00
2021 Totals	0.37	130.51	0.70	8.98	20.52	44.47	49.49	25.50	11.92	97.41	0.01	87.31

Notes:
gal = gallons
NM = not measured
Qtr = quarter

TABLE 6-3. WELL RECOVERY DATA - 2021
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

	Monitoring Well Recovery					
Date	RW-2R		RW-5		RW-6	
	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)	Hydrocarbon Recovered (gal)	Water Pumped (gal)
1/14/2021	NM	NM	0.36	6.96	1.96	6.64
3/31/2021	NM	NM	0.44	6.43	2.29	5.92
1st Qtr Totals	0.00	0.00	0.80	13.39	4.25	12.56
4/21/2021	NM	NM	0.75	6.27	0.70	7.24
5/3/2021	NM	NM	1.64	5.45	0.30	7.33
6/1/2021	NM	NM	1.82	5.27	1.28	6.61
2nd Qtr Totals	0.00	0.00	4.21	16.99	2.28	21.18
7/6/2021	NM	NM	1.94	4.94	2.44	5.48
8/2/2021	NM	NM	2.04	4.91	2.37	5.56
9/7/2021	1.97	4.87	1.98	4.86	2.29	5.52
3rd Qtr Totals	1.97	4.87	5.96	14.71	7.10	16.56
10/11/2021	0.00	10.86	1.94	4.82	2.18	5.57
11/2/2021	1.84	10.98	1.78	5.06	2.01	5.77
12/6/2021	1.89	4.77	1.79	5.03	1.79	5.79
4th Qtr Totals	3.73	26.61	5.51	14.91	5.98	17.13
2021 Totals	5.70	31.48	16.48	60.00	19.61	67.43

Notes:
gal = gallons
NM = not measured
Qtr = quarter



Western Refining Southwest LLC
D/B/A Marathon Gallup Refinery
2021 Annual Groundwater Monitoring Report

Appendices A through D (Please see attached CD)

Appendix A – 2021 Field Logs

Appendix B – Historical Fluid Level Measurements

Appendix C – 2021 Laboratory Analytical Reports

Appendix D – 2021 Data Validation Reports

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 165070

CONDITIONS

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 165070
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
scwells	Accepted for Record Retention Purposes-Only	12/8/2022