

AP - 111

C-141s



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov



RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

April 26, 2016

Mr. Ed Riege
Environmental Manager
Western Refining, Southwest Inc., Gallup Refinery
92 Giant Crossing Road
Gallup, New Mexico 87301

**RE: DISAPPROVAL
INTERIM MEASURES REPORT
HYDROCARBON SEEP AREA
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-15-002**

Dear Mr. Riege:

The New Mexico Environment Department (NMED) has reviewed the *Interim Measures Report Hydrocarbon Seep Area* (Report), dated July 2015, submitted on behalf of Western Refining Southwest Inc., Gallup Refinery (Permittee) and hereby issues this Disapproval with the following comments.

Comment 1

The Permittee improperly handled disposal of excavated soil. There are two issues to consider in disposal of contaminated soil: 1) is the soil characteristic hazardous waste, and 2) does the soil contain listed hazardous waste. NMED's July 31, 2013 letter regarding the hydrocarbon seep stated, "Western Refining must manage any gasoline-tainted soil removed from the site as hazardous waste unless and until analytical results confirm that the soil is not toxic hazardous waste for benzene (D018) or listed hazardous waste based on the source of the release." The laboratory analytical results for soil samples of excavated soil demonstrate that the soils were not characteristic hazardous waste. However, one of the sources of the seep is the Contact

Wastewater/Storm Sewer which handles process wastewater among other types of fluid. In addition to the traditional use of the sewer system, the Permittee also uses vacuum trucks for initial cleanup of spilled material and disposes of these fluids back into the sewer system upstream from the API Separator, which may include listed hazardous waste. Once process wastewater ceases lateral flow, for example when process water from the Contact Wastewater/Storm Sewer leaked from the corroded pipe and flow ceased in the surrounding soil, listed hazardous waste (F037) is generated. While the Permittee's soil analytical sampling results demonstrate that the excavated soils from the pipe excavation are not characteristic hazardous waste, the soils carry listed waste determinations (F037 at a minimum and potentially others (K049, K050, K051) because of the use of the sewer system). Mixtures of solid waste and listed hazardous waste must be regulated as hazardous waste; therefore, the soils were handled improperly. On page 2-5, the Permittee states, "[a] total volume of 278 cubic yards of non-hazardous soil was disposed off-site at the Gandy Marley, Inc. landfill in Chaves County, New Mexico." This facility is not permitted to receive hazardous waste. This situation is an example where communication between the Permittee and NMED was necessary in order to ensure compliance with the regulations. NMED is issuing a Notice of Violation regarding this issue. No revision to the Report is necessary.

Comment 2

The Permittee must include additional details in the revised Report. It is important to include descriptions of all field activities when reporting. The descriptions aid in understanding the data quality because the reader is not in the field to observe the activities. Revise the Report text to include the following:

1. Descriptions of the methods and procedures used to advance soil borings and install groundwater monitoring wells as well as the methods and procedures used to collect soil and groundwater samples for field screening and laboratory analysis. In addition, include information regarding the methods of logging the borings (e.g., collection of samples from split spoon, auger spoon/head, and auger cuttings), whether or not soil samples were collected for laboratory analysis (including locations) and how the sample intervals were chosen.
2. A description of the methods used to collect and dispose of recovered product.
3. Discussion of whether any additional soil removal may be necessary either in the seep area or in the areas where leaks occurred. Discuss whether or not additional dye tests will be conducted.
4. Discussion of the rationale for installing over twenty new permanent groundwater monitoring wells. Also provide information regarding whether or not the recovery wells are permitted through the Office of the State Engineer.

5. Discuss whether or not groundwater monitoring wells will be converted to recovery wells, if necessary. If not, propose to submit a Work Plan to continue hydrocarbon removal.
6. Discuss whether or not there are dedicated pumps in each well or if portable pumps are used. Discuss the disposition of the soil generated from the 14 excavations completed as part of the source identification.

Comment 3

The Permittee must include additional discussion of the effectiveness of the interim measures.

1. On page 2-4, under the Source Control heading, paragraph one, the Permittee states, "[t]he initial material recovered was estimated to be 50% water and 50% hydrocarbon; however, the percentage of hydrocarbon reduced significantly over the first couple of weeks and has declined to less than 1%." Please revise the Report to discuss how the percentages were calculated and discuss whether or not measurements of separate-phase hydrocarbon (SPH) thicknesses are collected in the excavation recovery sumps.
2. In paragraph two under the same heading, the Permittee states, "[b]eginning in August 2014, product recovery from individual monitoring wells was initiated. This involved recovery of total fluids (water and hydrocarbon) without accurate measurements from individual wells. Later the recovery process was modified to more accurately record recovery of product from the individual wells. Through June 30, 2015, 21 gallons of SPH has been recovered." In this instance, the Permittee needed to ensure that proper measurements were collected in order to effectively track changes in the plume. In the future, ensure that steps are taken to accurately measure initial product levels and then document changes over time so that there is a record of the effectiveness of the recovery. No revision is necessary.
3. Table 1 (Fluid Level Measurements) demonstrates that the hydrocarbon thickness since July 2013 has generally decreased, remained stable, or fluctuated over time in the groundwater monitoring wells with the exception of MKTF-12 and MKTF-45 where increasing levels of hydrocarbons were measured. Revise the Report to provide more discussion regarding trends in the amounts of SPH measured in groundwater monitoring wells over time and whether or not there are obvious patterns to the amount of hydrocarbons measured in the wells (to determine plume migration and the effectiveness of interim measures).

Comment 4

Revise the Report to discuss whether or not the vertical and lateral impacts of the leaks and related contaminant plumes have been determined or if additional soil borings and groundwater monitoring wells are planned. If impacts have not been fully defined or if the contaminant plume(s) require additional investigation to determine the nature and extent, then propose to install additional soil borings and/or groundwater monitoring wells.

Comment 5

On page 2-2, the Permittee states “[t]wo additional dye tests were conducted in the process sewer system with a yellow/green dye introduced into the sewer at the transmix unloading area (a short distance northwest of the main truck loading racks) on September 23, 2013 and a red dye introduced at the lab sinks on September 24, 2013 ... [t]he green/yellow dye appeared to be present in nine wells (SB04, SB05, SB06, SB08, SB10, SB11, SB19, SB20, and SB21), which are all located further south. Although the dye tests were not conclusive, the separate patterns of the two dyes suggest the possibility of two separate release points from the sewer lines. The red dye appears to have exited the sewer line from a hole identified near the bundle cleaning pad (see discussion below). The source location of the yellow/green dye is not currently known.” Revise the Report to describe the plans to address the source of the yellow-green dye that has yet to be determined. NMED is aware that the Permittee intends to submit a work plan for the Main Loading Rack Area (AOC 35); however, if there is an active leak, the Permittee must address this prior to the agreed upon submittal date for the work plan in RCRA Permit Table E-2. Additionally, the Permittee must identify all suspected units and piping and include a schedule for additional dye tracer or other studies to identify other potential sources of contamination.

Comment 6

Please provide a table, similar to the table provided in the Permittee’s Facility-Wide Groundwater Monitoring Report(s), that lists the newly installed groundwater monitoring wells by name, the design specifications of the wells, date installed, the surveyed groundwater top of casing information, the screened intervals, most recently measured depth to water, and the latest SPH measurement(s).

Comment 7

On page 2-3 the Permittee states, “[o]n August 19, 2013 an operator walking the aboveground pipeline rack looking for possible leaks observed hydrocarbon on the land surface in the secondary containment east of tank T-3. The location of the leak, which is just west of the above ground pipeline rack that runs north to south along the east side of the marketing tank farm, is shown on Figure 2. Once the release was discovered a small earthen berm was built approximately 10 ft to the west of the release, which held approximately 1.5 barrels of hydrocarbon.” This release was not reported to NMED or the Oil Conservation Division (OCD). NMED notes that OCD has a “minor release” reporting limit of 5 barrels; however, the Permittee is required to report all releases to NMED. In addition, it is likely that more than 1.5

barrels were released and some quantity of the released fluids soaked into the surrounding soils for 1.5 barrels to seep into the ground surface. Further in the paragraph the Permittee states, “[i]t was identified as a transmix/slop 6 to 8 inch line that is only used during the unloading of transmix trucks at the truck rack, thus it would only have been an intermittent source. Trucks are unloaded at the rack and this line transports the transmix/slop to T-231. The line was taken out of service, cleaned and blanked off. The line was replaced with an aboveground pipeline.” Revise the Report to also discuss whether any soil was excavated and whether the release was investigated to determine the extent of subsurface contamination.

Comment 8

On page 2-3 the Permittee states, “[a] camera survey was conducted on multiple segments of the sewer line in the western portion of the refinery on August 27 and 28, 2013. Based on this visual inspection, a hole in the sewer line was identified approximately 20 feet south of the sewer box on the west side of the bundle cleaning pad.” Revise the Report to discuss whether the camera survey was only conducted in the western portion of the refinery or if it included other areas of the sewer line. Please also explain if any other issues were noted that may not have been addressed by the removal of the corroded section of line. If available, provide still pictures from the video showing the corrosion and holes in the pipe. Additionally, provide information regarding the disposition of the section of pipe removed.

Comment 9

On page 2-4 under the Source Control Measures heading, the Permittee discusses the soil excavations which were left open to facilitate the recovery of hydrocarbons and groundwater. Revise the Report to include descriptions of the depths of the excavations as well as information regarding the depth of the six-inch PVC screens inserted into the excavations for recovery of liquids. The Permittee must discuss whether or not hydrocarbons are still being recovered from excavation sumps S1 through S6. See also Comments 2 and 3.

Comment 10

NMED notes that its concern regarding Tanks 101 and 102 as a potential source is partially addressed by the Permittee’s fuel distillation curve; however, as stated in correspondence dated November 8, 2013, NMED questions the quality of Western Refining’s in-house laboratory results and requires a fuel fingerprint conducted by an independent, analytical laboratory which has not been certified by the National Environmental Laboratory Accreditation Conference (NELAC) or demonstrated consistent comparability with off-site laboratory results in the past. Additionally, the cleanup of a spill at Tanks 101 or 102 resulted in the original seep being discovered in 2007; it does not appear that the Permittee conducted any soil or groundwater sampling in the area where the 2007 seeps were discovered during the current seep investigation. This source and migration pathway may still exist and must be investigated. NMED also notes that all of the contours for the contaminant plumes stop at these tanks; these figures are likely not

accurate depictions of the contaminant plumes due to the absence of data. The Permittee must propose to investigate the potential contamination at Tanks 101 and 102 in the revised Report.

Comment 11

On page 2-5, the Permittee states, “[t]he overall excavation was approximately 180 feet long, 20 feet wide and up to 12 feet deep and is depicted in Figure 4.” In the next paragraph the Permittee states, “[a] total volume of 278 cubic yards of non-hazardous soil was disposed off-site at the Gandy Marley, Inc. landfill in Chaves County, New Mexico.” NMED understands that the variability of the bottom of the final excavation, the presence of the pipe, and backfill will affect the volume of soil removed, but it seems that 278 cubic yards of excavated soil may be an underestimation or miscalculation based on the dimensions of the excavation. Provide a description of the wastewater pipeline dimensions and also the disposition of the wastewater pipeline. Please revise the Report to provide a corrected volume estimate or address this concern in the comment response letter as part of the revised Report submittal.

Comment 12

The Permittee collected four soil samples from the intersection of the sidewall and floors on all four sides of the excavation to the west of the Heat Exchanger Bundle Cleaning Pad. The laboratory reports show the sample identifications as “Pit-North-9’, Pit-East-9’, Pit-South-9’, and Pit-West-9’.” If parts of the excavation went to depths of up to 12 feet, the Permittee should have collected samples from the deepest part of the excavation. Generally, confirmation samples should be collected from the sidewalls as well as the bottom of the excavation. No revision to the Report is required.

Comment 13

Table 2 (Chemical Analyses) demonstrates that the groundwater at the facility is impacted by total petroleum hydrocarbons as well as solvents and polycyclic aromatic hydrocarbons (PAHs). Revise the Report to include discussion of the groundwater analytical results.

1. The analytical results for MKTF-9 (SB13) reveal that concentrations of trichloroethene (TCE) above the regulatory limit are present in the groundwater. TCE was also detected at concentrations above the maximum contaminant level (MCL) in groundwater monitoring wells MKTF-2, MKTF-4, MKTF-25 and MKTF-37. Discuss the possible sources of TCE at the facility.
2. Vinyl chloride is consistently detected in groundwater at concentrations above standards in well MKTF-11 with other detections above cleanup levels in other groundwater monitoring wells, but not with any consistency. 1,2-Dichloroethane (EDC) was also detected in the groundwater. Discuss the possible source(s) of chlorinated solvents at the facility. Since EDC is a lead scavenger, the Permittee must add analysis for 1,2-Dibromoethane (EDB) in all monitoring wells where EDC has been detected; this change

must be incorporated into the latest Facility-Wide Groundwater Monitoring Work Plan. The Permittee must use an analytical method capable of detecting EDB at concentrations less than 0.004 micrograms per liter (e.g., EPA Method 8011).

3. Concentrations of 2-Methylnaphthalene are above the cleanup standard in groundwater monitoring wells MKTF-4, MKTF-9, MKTF-10, MKTF-11, MKTF-15, MKTF-16, MKTF-18, MKTF-19, MKTF-20, MKTF-22, MKTF-23, MKTF-36, and MKTF-37. 2-Methylnaphthalene was detected once in production well PW-3 in 2009; however, rather than being an anomaly, the result may be a consequence of contamination in soils and groundwater migrating to the Sonsela aquifer. Discuss the detection of 2-Methylnaphthalene.

Revise the Report to discuss the analytical results in more detail as well as discuss the plumes depicted in Figures 10 through 16 in the text. The Facility-Wide Groundwater Monitoring Plan must include proposed chemical analyses of groundwater samples for semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) in all wells downgradient from the Marketing Tanks and the Sewer/Contact Wastewater System.

Comment 14

NMED notes that SVOCs were not included in the analytical suite for the soil samples collected for confirmation and waste disposal. In the revised Report discuss the reasons why SVOCs were not analyzed. In the future, SVOC testing must be included in the laboratory analytical suite for soil samples.

Comment 15

On page 2-8 the Permittee states, “[b]ased on well development and sampling efforts, many of the wells do not produce significant volumes of water with the exception of wells located near the sanitary lagoon.” The Permittee did not provide boring logs or well construction diagrams for the STP-wells. In the revised Report provide the boring logs and well construction details for STP1-NW and SW. Revise the Report to discuss whether or not the water levels at the sanitary lagoon are currently elevated due to the leaking system or if the water levels are not affected by refinery operations. The Permittee must discuss whether or not the sanitary lagoon is leaking and whether or not saturated zones were encountered when constructing STP-1. Also identify the other monitoring wells which are not producing water and monitoring wells with low recharge rates (i.e., name the wells with low recharge, provide the flow rate). Propose to install groundwater wells at depths that intersect the water table.

Comment 16

The groundwater level measurements presented in Table 1 are variable. For example:

MKTF-01	Top of Casing (ft msl)	Depth to HC (ft btoc)	Depth to GW (ft btoc)	Hydrocarbon Thickness (ft)	Corrected GW Elev	Difference
7/11/2013	6920.67	ND	6.60	0.00	6914.07	
7/12/2013	6920.67	ND	6.60	0.00	6914.07	0
7/17/2013	6920.67	ND	6.80	0.00	6913.87	-0.2
8/14/2013	6920.67	ND	9.19	0.00	6911.48	-2.39
9/25/2013	6920.67	5.44	6.36	0.92	6915.04	3.56
11/20/2013	6920.67	ND	6.64	0.00	6914.03	-1.01
1/13/2014	6920.67	7.90	8.34	0.44	6912.68	-1.35
2/12/2014	6920.67	6.73	6.74	0.01	6913.94	1.26
3/11/2014	6920.67	6.10	6.38	0.28	6914.51	0.57
4/8/2014	6920.67	7.05	7.25	0.20	6913.58	-0.93
9/15/2014	6920.67	6.94	6.98	0.04	6913.72	0.14
3/11/2015	6920.67	ND	5.85	0.00	6914.82	1.1
6/9/2015	6920.67	ND	7.15	0.00	6913.52	-1.3

Revise the Report to explain the variability in the groundwater elevations.

Comment 17

The hydrocarbon thickness measurements for groundwater monitoring well MKTF-15 (SB31) indicate that SPH was not observed from November 2013 through September 2014; however, in March 2015 and June 2015 hydrocarbons were detected at 0.75 feet and 0.58 feet thickness respectively. MKTF-15 is located just east of the crude tanks (Tank 101 and Tank 102) and is one of the closest groundwater monitoring wells to both the Marketing Tanks and to the Sewer line leak. Revise the Report to discuss the apparent lag in detection of hydrocarbons in the groundwater monitoring well located closest to the sources of the seep.

Comment 18

The boring and well completion logs for MKTF-27 and MKTF-28 do not demonstrate that any moist or saturated intervals were encountered (although the borings were described as “damp” throughout the soil column) nor is there a water level recorded on the log. However, groundwater samples were collected according to laboratory results in Table 2 and the laboratory reports in Appendix D. Discuss the water levels in these wells and whether or not the wells are screened across the water table. Additionally, if there are other wells that were installed without the presence of groundwater at the time of installation, the Permittee must discuss water levels relative to the screened intervals at those groundwater monitoring wells (many of the well logs

indicate "saturation" rather than a water level, discuss whether a water level was measured at the time of installation and whether or not the well screen intersects the water table).

Comment 19

Figure 12 (Dissolved Iron Concentration) shows three elevated areas of dissolved iron in groundwater that generally correlate to the two suspected release areas and to an area just south of Tanks 101 and 102. Please revise the Report to discuss whether or not the third area containing elevated dissolved iron concentrations can be correlated to any underground piping in that area or releases of petroleum-related contaminants.

Comment 20

Figure 13 displays MTBE concentrations and clearly demonstrates that MTBE was released in the vicinity of the Main Loading Racks/Crude Slop (Transmix) and Ethanol Unloading Facility/Loading Rack Additive Tank Farm. Revise the Report to include information about historic use of MTBE at the facility and discuss how and where the MTBE was stored and conveyed at the facility.

Comment 21

Appendix XCC contains the well survey report from DePauli Engineering. The well surveys for MKTF 35 through MKTF 45 are not included. Provide the well survey data for these wells in the revised Report.

Comment 22

Because the investigation is not yet complete, the Permittee must revise the Report to propose providing quarterly status reports regarding product recovery, planned additional measures and efforts to address leaking pipes or tanks at the Main Truck Loading Racks.

The Permittee must address all comments in this Disapproval and submit a revised Report. In addition, include a red-line strikeout version in electronic format showing where all revisions have been made. The revised Report must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The revised Report must be submitted to NMED no later than **August 1, 2016**.

Mr. Riege
Gallup Refinery
April 26, 2016
Page 10

If you have questions regarding this Disapproval, please contact Kristen Van Horn of my staff at 505-476-6046.

Sincerely,



John E. Kielling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
K. Van Horn, NMED HWB
C. Chavez, EMNRD OCD
A. Hains, WRG
L. King, EPA

File: Reading File and WRG 2016 File
WRG-15-002

Certified Mail #7010 1670 0001 3141 1061

Mr. John E. Kieling, Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, New Mexico 87505-6303

RE: RESPONSE TO DISAPPROVAL
OW-14 SOURCE AREA INVESTIGATION WORK PLAN
OW SERIES WELLS AND CONTAMINANT PLUME MIGRATION WESTERN
REFINING SOUTHWEST INC., GALLUP REFINERY EPA ID #
NMD000333211
HWB-WRG- 15-005

Dear Mr. Kieling:

Western Refining Southwest, Inc. ("Western") has revised the referenced Investigation Work Plan pursuant to your comments received December 15, 2015. Your comments are shown below followed by Western's response.

NMED Comment 1

The Permittee submitted the Work Plan as an unbound document. Although there are no formal requirements to bind submittals, NMED prefers submittal of bound documents to facilitate placement and storage in the Hazardous Waste Bureau library.

Western Response

The Work Plan was inadvertently submitted unbound, as it was confused with another submittal being prepared that consisted of only replacement pages. Western will submit bound documents when full documents are being submitted.

NMED Comment 2

Installation of two monitoring wells may not be sufficient to investigate the potential source(s) of contamination as required by NMED's May 11, 2015 letter. Please propose soil boring locations in addition to the installation of two monitoring wells in order to locate the potential source(s) of contamination in groundwater. The Permittee is required to propose an investigation that provides accurate data for the evaluation of site conditions, the nature and extent of contamination, and contaminant migration. The proposed investigation must attempt to define the extent of the contaminant plume in groundwater as well as evaluate soils for potential contamination. Revise the Work Plan to propose additional soil borings (where practicable), near or within the Tank Farm to define the nature and extent of contamination.

Western Response

The Investigation Work Plan has been revised to include additional soil borings within the tank farm to support delineation of the nature and extent of contamination. This includes six additional soil boring/temporary wells near Tanks 568, 569, and 570 and a new provision in Section 4.1 to provide for additional soil borings/temporary wells, as necessary, to complete delineation.

Please find enclosed two new bound hard copies of the revised work plan and a CD that contains a redline-strikeout version of the work plan text and an electronic copy of the revised work plan.

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,

A handwritten signature in black ink, appearing to read "Daniel J. Statile", with a stylized flourish at the end.

Mr. Daniel J. Statile

VP Refining

Western Refining Southwest, Inc. – Gallup Refinery

cc D. Cobrain NMED HWB
 N. Dhawan, NMED HWB
 K. Van Horn, NMED HWB
 C. Chavez, OCD
 L. King, EPA
 A. Allen, Western El Paso

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: WESTERN REFINING	Contact: Beck Larsen
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No. (505) 722-0258
Facility Name: WESTERN REFINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	API No.
---------------	---------------	---------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15 N	15 W					MCKINLEY

Latitude 35° 029' 024" Longitude 108° 024' 024"

NATURE OF RELEASE

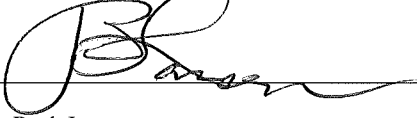
Type of Release: Spent Caustic/ Acid Soluble Oil (ASO)	Volume of Release- 4 bbls (168 gal)	Volume Recovered: 3 bbls (126 gal)
Source of Release: Baker Frac Tank	Date and Hour of Occurrence 4-3-16 @ 1145 hrs	Date and Hour of Discovery 4-3-16 @ 1145 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD (C. Chavez;/Brandon Powell); /NMED HWB (Kristen Van Horn),	
By Whom? Ed Riege, Manager of Remediation	Date and Hour: 4-4-16 @ 1000 hrs	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.* Spent caustic was offloaded into a Baker Frac Tank that contained Acid Soluble Oil (ASO). The Baker Frac Tank was overfilled spilling about 4 bbls of caustic/ ASO mixture onto the soil. The onsite vacuum truck was dispatched to remove all liquid material from the affected area.

Describe Area Affected and Cleanup Action Taken.* The affected area included the earthen area to the east side of the baker tank and about 2 to 3 feet wide by 15 yards long north of the roadway. Soil removal and cleanup began on Tuesday, April 8, 2015 and was completed on Wednesday, April 9. Approximately 30 to 36 cubic yards of material was removed and will be transported off-site as Hazardous Waste to Advanced Chemical Transport (ACT) in Albuquerque, NM. The material recovered was brown to black in color. Soil samples were collected using EPA Method 5035 sampling techniques and submitted to the laboratory for analysis. Further excavation is pending as determined from evaluation of analysis. Methods to prevent the recurrence will be to improve labeling and control of work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Beck Larsen		Approved by Environmental Specialist:	
Title: Environmental Engineer		Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 4/7/2016 Phone: (505) 722-0258			

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, April 05, 2016 7:34 AM
To: Chavez, Carl J, EMNRD
Subject: Gallup Refinery (AP-111) Release of ~ 4 bbl of Mixed Acid Soluble Oil and Spent Caustic Tank Overflow South Hurtado Tank Farm

Note to file:

On 4/5 received a voice mail msg. from Ed Riege (Gallup Refinery) at (505) 722-0217 on 4/4 at 10:05 a.m. that a release had occurred on 4/3 at ~ 11:45 a.m. at an Acid Soluble Oil (ASO) Tank at the South Hurtado Tank Farm after a vacuum truck operator poured spent caustic into the ASO tank and ~ 4 bbl. overflowed and ran onto the dirt roadway for about 15 yds. The fluid (observed to be neutral pH in field) was vacuumed up and is being containerized as hazardous waste disposal. Contaminated dirt is being excavated on 4/4 and handled as haz. waste. A C-141 is forthcoming.

Carl J. Chavez, CHMM
Environmental Engineer
Oil Conservation Division- Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Phone: (505) 476-3490
Main Phone: (505) 476-3440
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: www.emnrd.state.nm.us/oed

Why not prevent pollution, minimize waste, reduce operation costs, and move forward with the rest of the Nation? To see how, go to "Publications" and "Pollution Prevention" on the OCD Website.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, February 23, 2016 5:04 PM
To: 'Larsen, Thurman'; VanHorn, Kristen, NMENV; Cobrain, Dave, NMENV; Smith, Cory, EMNRD
Subject: RE: FCC Feed Tank (T-714) Overflow from 2-5-16

Beck:

Good afternoon. NMED and OCD have reviewed the information provided in your Feb. 19, 2016 E-mail below and have the following comments/questions/requirements:

- 1) The C-141 Form is dated 7/19/2016 instead of 2/19/2016.
- 2) The hand drawn map has no scale, but indicates product migrated mainly toward the S and NW within the berm area from Tank 714, but soil confirmation sample locations are not shown on any map.
- 3) Confirmation soil samples for TPH (DRO-MRO) and SVOCs is required in addition to any proposed sampling in the bermed area.
- 4) What sampling methods were used to collect soil samples for waste characterization?
- 5) When will Western provide the pending sampling analyses associated with the rest of the roll-off containers mentioned in the Initial C-141 Form to the agencies? The results were expected ~ 2/24.
- 6) A map with confirmation sample locations is required to verify the condition of remaining soil in the spill release area.
- 7) Provide the information with verification of soil remediation in a final spill report with waste manifests to the agencies.

Thank you.

Carl J. Chavez, CHMM
Environmental Engineer
Oil Conservation Division- Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Phone: (505) 476-3490
Main Phone: (505) 476-3440
Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Website: www.emnrd.state.nm.us/oed

Why not prevent pollution, minimize waste, reduce operation costs, and move forward with the rest of the Nation? To see how, go to "Publications" and "Pollution Prevention" on the OCD Website.

From: Larsen, Thurman [mailto:Thurman.Larsen@wnr.com]
Sent: Friday, February 19, 2016 5:51 PM
To: VanHorn, Kristen, NMENV <Kristen.VanHorn@state.nm.us>; Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: FCC Feed Tank (T-714) Overflow from 2-5-16

Dear Kristen and Carl,

The following is the initial C-141 Report with attachment as required. Please let me know if you required additional information.

Sincerely,
Beck

Chavez, Carl J, EMNRD

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Friday, February 19, 2016 5:51 PM
To: VanHorn, Kristen, NMENV; Chavez, Carl J, EMNRD; Cobrain, Dave, NMENV; Smith, Cory, EMNRD
Subject: FCC Feed Tank (T-714) Overflow from 2-5-16
Attachments: 201602191718.pdf; 201602191718.pdf; 201602191719.pdf; 201602191720.pdf; 201602191720.pdf; Tank 714 Heavy Oil Release in Hot Oil Tank Farm

Dear Kristen and Carl,

The following is the initial C-141 Report with attachment as required. Please let me know if you required additional information.

Sincerely,
Beck

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Sent: Tuesday, February 16, 2016 3:32 PM
To: Larsen, Thurman
Cc: VanHorn, Kristen, NMENV; Smith, Cory, EMNRD
Subject: Tank 714 Heavy Oil Release in Hot Oil Tank Farm

Follow Up Flag: Follow Up
Due By: Tuesday, February 16, 2016 10:09 PM
Flag Status: Flagged

This email was sent by an external sender. Please use caution when opening attachments, clicking web links, or replying until you have verified this email sender.

Beck:

Good afternoon. OCD has not received the C-141 for the release listed below? What is the status of this release?

Carl on 2/5 @ ~ 6:55 am received verbal notification from Beck Larsen of a >25 bbls release at ~ 4:56 am of heavy oil from Tank 714 within the diked Hot Oil Tank Farm. The cause is suspected to be related to a faulty tank overfill gauge malfunction. The FD is on location and the vacuum truck is on the way.

Thank you.

Carl J. Chavez, CHMM
Environmental Engineer
Oil Conservation Division- Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Phone: (505) 476-3490
Main Phone: (505) 476-3440
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: www.emnrd.state.nm.us/ocd

Why not prevent pollution, minimize waste, reduce operation costs, and move forward with the rest of the Nation? To see how, go to "Publications" and "Pollution Prevention" on the OCD Website.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: WESTERN REFINING	Contact: Beck Larsen
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No. (505) 722-0258
Facility Name: WESTERN RENINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	API No.
---------------	---------------	---------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15 N	15 W					MCKINLEY

Latitude 35° 029' 010" Longitude -108° 025' 029"

NATURE OF RELEASE

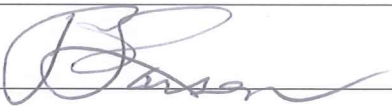
Type of Release: FCC FEED (T-714) Tank Overflow	Volume of Release- 300 to 800 bbls (oil) (estimated)	Volume Recovered: 120 bbls Oil/ 600 bbls (water) (YTD)
Source of Release: FCC Feed (Heavy Oil)	Date and Hour of Occurrence 02/5/2016; 0345 hrs	Date and Hour of Discovery 02/5/2015; 0415 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD (C. Chavez) / NMED HWB (Kristen Van Horn)	
By Whom? Beck Larsen	Date and Hour: 2/5/2016 / 0654	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

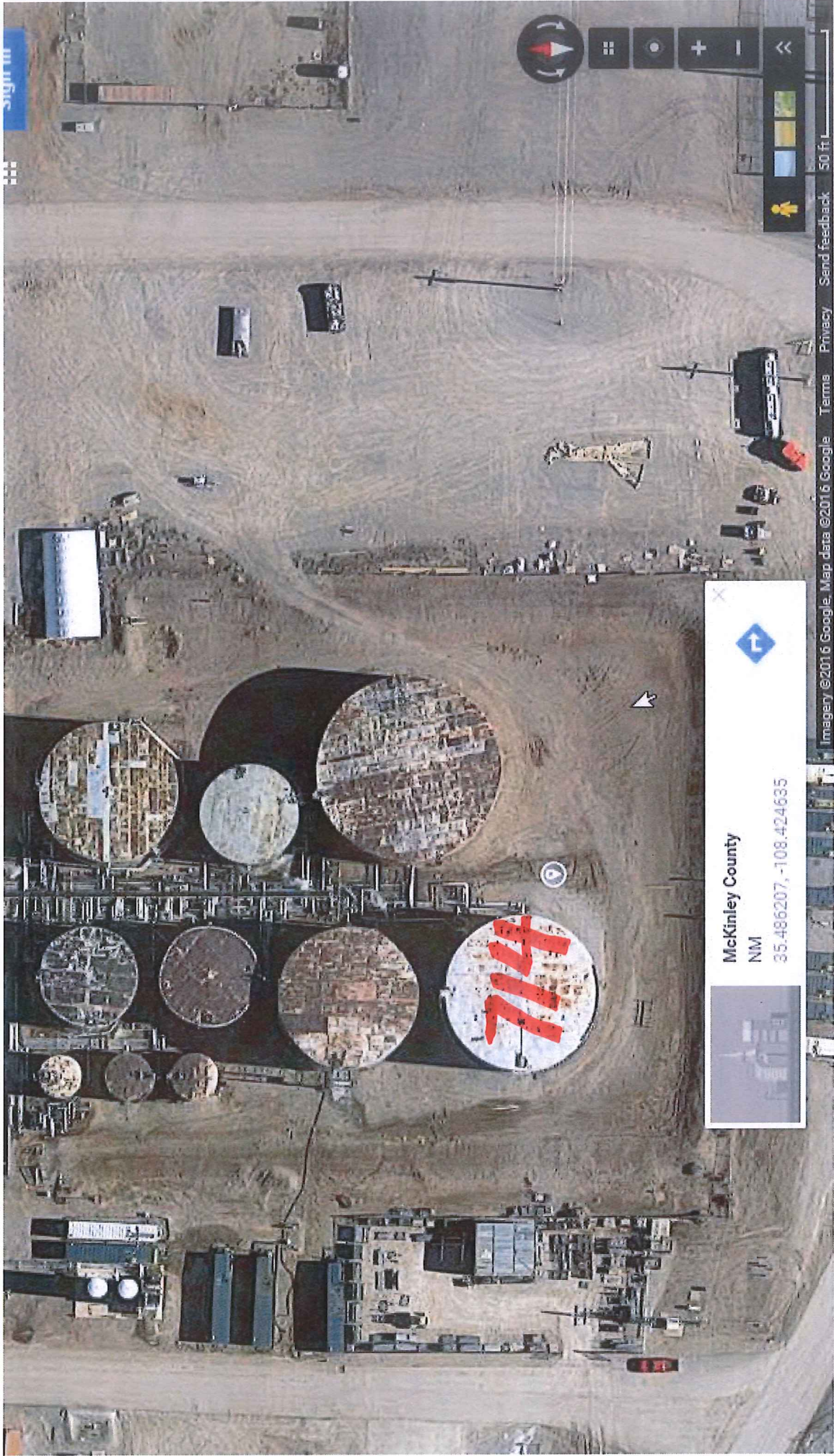
Describe Cause of Problem and Remedial Action Taken.* The FCC Tank (Heavy Oil) (T-714) overflowed on Friday, February 5, 2016 in the Hot Oil Tank Farm. The Pumper-gauger made an inspection of the area at 8:00 Pm on Thursday, February 4, 2016 with no indication of issues based on gauge readings. The Pumper-gauger made another early morning rounds at 0415 on February 5 at 0415. At this time T-714 FCC Feed Tank was overflowing due to a possible gauge malfunction. Valves were blocked in and product was rerouted to T-701. The onsite Fire Department, Offsite Supervisors, Process Supervisor, and the Environmental Department was notified of the incident. The onsite Fire Department sprayed a blanket of foam and water over the entire affected area in order to prevent any potential hazards associated with the overflow. The Environmental Department arrived at the scene at about 0615 hours, February 5. A contract vacuum truck began removing liquids until further assessment could be determined. The FCC Feed Product was contained within an earthen dike containment area of the Hot Oil Tank Farm. The exact quantity of release is undetermined at this point due to the uncertainty as to the exact time that the overflowed occurred, the amount of foam/water utilized, and the amount of water/snow melt from previous snow fall. The amount of the FCC Feed product that was released is only an estimate at this point and is under investigation. Records of the amount of cleanup efforts and the amount of material will be utilized at the completion of the project and will be used for the Final C-141 Report.

Describe Area Affected and Cleanup Action Taken.* After assessment of the spilled area, a contract company determined that in-situ solidification of the spilled area would be necessary using non-contaminated dirt. A contract company arrived on Monday, February 8, to begin the solidification process. The in-situ solidification process was deemed futile because the material would not solidify in-situ but would relocate to other areas. Therefore, the cleanup strategy was changed to solidification in roll-off boxes. An initial sample was collected on February 8 under (Laboratory # 1602354, see attached) from 3 roll-off containers (45 cubic yards) and submitted to Hall Environmental Laboratories for analysis. The analysis was received for (Laboratory Report # 1602354) on February 17 that indicated non-detect (ND) for all Environmental constituents. To date the contract company has filled about 30 roll-off boxes with FCC Feed product and dirt mixtures. Redrock Landfill requires analysis for each 100 yards of material. Composite samples were collected from 12 additional roll-off boxes (180 cubic yards) and sent to Hall for analysis. These 15 roll-off box containers will equate to about 225-270 cubic yards of material that will be shipped to Redrock Landfill for landfarming. The most recent sent of analysis is pending and is expected to be finalized early next week. The landfill is requesting additional analysis prior to shipment to determine which area of the landform the material has to be delivered. Attached is a copy of the initial analysis (Lab# 1602354), SDS for the FCC Feed, Map showing the approximate geographical coordinate location, and a sketch of the extent of the material around the FCC Feed Tank (T-714).

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Beck Larsen:		Approved by Environmental Specialist:	
Title: Environmental Engineer		Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7/19/2016 Phone: (505) 722-0258			

* Attach Additional Sheets If Necessary





McKinley County
NM
35.486207, -108.424635





SAFETY DATA SHEET

Cat Cracked Distillate, Heavy



Section 1. Identification

GHS product identifier : Cat Cracked Distillate, Heavy
Chemical name : Distillates (petroleum), heavy catalytic cracked
Other means of identification : FCC Heavy Cycle Oil, HCO, Cat Cracked Gas Oil, Heavy Cat Gas Oil

Relevant identified uses of the substance or mixture and uses advised against

Not available.

Supplier's details : Western Refining Company LP
 123 W. Mills Avenue
 El Paso, TX 79901
 Tel: 915-534-1488

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3877 (24/7)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
 CARCINOGENICITY - Category 1B

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Combustible liquid.
 May cause cancer.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. - No smoking.

Response : IF exposed or concerned: Get medical attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Substance
Chemical name	: Distillates (petroleum), heavy catalytic cracked
Other means of identification	: FCC Heavy Cycle Oil, HCO, Cat Cracked Gas Oil, Heavy Cat Gas Oil

CAS number/other identifiers

CAS number	: 64741-61-3
Product code	: Not available.

Ingredient name	%	CAS number
Distillates (petroleum), heavy catalytic cracked	100	64741-61-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Combustible liquid.
- Hazardous thermal decomposition products** : No specific data.

- Special protective actions for fire-fighters** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

- : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

- : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures

- : Appropriate techniques should be used to remove potentially contaminated clothing. IF ON SKIN (or hair): Wash contaminated clothing before reuse.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Brown to black.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : >-10°C (>14°F)
- Boiling point** : 204.44 to 426.67°C (400 to 800°F)
- Flash point** : Closed cup: 65.556 to 93.333°C (150 to 200°F)
Open cup: >115.56°C (>240°F) [Cleveland.]
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1%
Upper: 6%
- Vapor pressure** : <0.13 kPa (<1 mm Hg) [room temperature]
- Vapor density** : Not available.
- Relative density** : 0.97 to 0.99
- Solubility** : Soluble in hydrocarbon solvents; insoluble in water.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 371°C (699.8°F)
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Section 11. Toxicological information

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid

Section 13. Disposal considerations

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	NA1993	Not regulated.	Not regulated.
UN proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (Distillates (petroleum), heavy catalytic cracked)	-	-
Transport hazard class(es)	3	-	-
Packing group	III	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

AERG : 128

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** This material is listed or exempted.
United States inventory (TSCA 8b): This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Section 15. Regulatory information

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), heavy catalytic cracked	100	No.	No.	No.	No.	Yes.

State regulations

Massachusetts : This material is not listed.

New York : This material is not listed.

New Jersey : This material is not listed.

Pennsylvania : This material is not listed.

California Prop. 65

No products were found.

International regulations

International lists :

- Australia inventory (AICS)**: This material is listed or exempted.
- China inventory (IECSC)**: This material is listed or exempted.
- Japan inventory**: Not determined.
- Korea inventory**: This material is listed or exempted.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
- Philippines inventory (PICCS)**: Not determined.
- Taiwan inventory (CSNN)**: Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

Section 16. Other information

History

Date of issue mm/dd/yyyy : 07/31/2014

Date of previous issue : 05/15/2013

Version : 3

Revised Section(s) : 8, 16.

Prepared by : KMK Regulatory Services Inc.

Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Chavez, Carl J, EMNRD

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Tuesday, February 02, 2016 2:59 PM
To: Smith, Cory, EMNRD; VanHorn, Kristen, NMENV; Cobrain, Dave, NMENV; Chavez, Carl J, EMNRD
Subject: Initial C-141 Report T-583
Attachments: T-583 C-141 Initial 010216.pdf

Dear All; The above attachment is the C-141 for the T-583 ULSD (Ultra Low Sulfur Diesel) Tank Overflow that occurred on January 2, 2016. A subsequent follow-up final C-141 report will be submitted at the completion of the cleanup project.
Regards,

Beck Larsen
Environmental Engineer
Western Refining Southwest (Gallup Refinery)
92 Giant Crossing Road - New Mailing Address
Gallup, NM 87301
Office: (505) 722-0258
cell: (505) 862-1749



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 17, 2016

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL:
FAX

RE: Tank 714 FCC Feed Spill

OrderNo.: 1602354

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/9/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602354

Date Reported: 2/17/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Feed Spill

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 1:00:00 PM

Lab ID: 1602354-001

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: pmf
Mercury	ND	0.020		mg/L	1	2/12/2016 10:17:19 AM	23694
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Barium	ND	100		mg/L	1	2/12/2016 9:54:42 AM	23696
Cadmium	ND	1.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Chromium	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Lead	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Selenium	ND	1.0		mg/L	1	2/12/2016 9:54:42 AM	23696
Silver	ND	5.0		mg/L	1	2/12/2016 9:54:42 AM	23696
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
3+4-Methylphenol	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
Phenol	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
2,4-Dinitrotoluene	ND	0.13		mg/L	1	2/16/2016 1:45:28 PM	23755
Hexachlorobenzene	ND	0.13		mg/L	1	2/16/2016 1:45:28 PM	23755
Hexachlorobutadiene	ND	0.50		mg/L	1	2/16/2016 1:45:28 PM	23755
Hexachloroethane	ND	3.0		mg/L	1	2/16/2016 1:45:28 PM	23755
Nitrobenzene	ND	2.0		mg/L	1	2/16/2016 1:45:28 PM	23755
Pentachlorophenol	ND	100		mg/L	1	2/16/2016 1:45:28 PM	23755
Pyridine	ND	5.0		mg/L	1	2/16/2016 1:45:28 PM	23755
2,4,5-Trichlorophenol	ND	400		mg/L	1	2/16/2016 1:45:28 PM	23755
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	2/16/2016 1:45:28 PM	23755
Cresols, Total	ND	200		mg/L	1	2/16/2016 1:45:28 PM	23755
Surr: 2-Fluorophenol	77.0	19-121		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: Phenol-d5	71.7	31.8-117		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: 2,4,6-Tribromophenol	104	31.3-139		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: Nitrobenzene-d5	99.0	48.2-128		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: 2-Fluorobiphenyl	97.8	58.4-114		%Rec	1	2/16/2016 1:45:28 PM	23755
Surr: 4-Terphenyl-d14	98.5	17.4-141		%Rec	1	2/16/2016 1:45:28 PM	23755
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF
Benzene	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
2-Butanone	ND	200		ppm	10	2/11/2016 1:07:11 PM	23666
Carbon tetrachloride	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
Chlorobenzene	ND	100		ppm	10	2/11/2016 1:07:11 PM	23666
Chloroform	ND	6.0		ppm	10	2/11/2016 1:07:11 PM	23666
1,4-Dichlorobenzene	ND	7.5		ppm	10	2/11/2016 1:07:11 PM	23666
1,1-Dichloroethene	ND	0.70		ppm	10	2/11/2016 1:07:11 PM	23666

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1602354

Date Reported: 2/17/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** Tank 714 FCC Feed Spill**Project:** Tank 714 FCC Feed Spill**Collection Date:** 2/8/2016 1:00:00 PM**Lab ID:** 1602354-001**Matrix:** SOIL**Received Date:** 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: DJF
Tetrachloroethene (PCE)	ND	0.70		ppm	10	2/11/2016 1:07:11 PM	23666
Trichloroethene (TCE)	ND	0.50		ppm	10	2/11/2016 1:07:11 PM	23666
Vinyl chloride	ND	0.20		ppm	10	2/11/2016 1:07:11 PM	23666
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666
Surr: Dibromofluoromethane	99.5	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666
Surr: Toluene-d8	104	70-130		%Rec	10	2/11/2016 1:07:11 PM	23666

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602354

Date Reported: 2/17/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Product

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 4:25:00 PM

Lab ID: 1602354-002

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: pmf
Mercury	ND	0.020		mg/L	1	2/12/2016 10:22:59 AM	23694
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Barium	ND	100		mg/L	1	2/12/2016 9:55:56 AM	23696
Cadmium	ND	1.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Chromium	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Lead	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Selenium	ND	1.0		mg/L	1	2/12/2016 9:55:56 AM	23696
Silver	ND	5.0		mg/L	1	2/12/2016 9:55:56 AM	23696
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
3+4-Methylphenol	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
Phenol	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
2,4-Dinitrotoluene	ND	0.13		mg/L	1	2/16/2016 1:15:23 PM	23755
Hexachlorobenzene	ND	0.13		mg/L	1	2/16/2016 1:15:23 PM	23755
Hexachlorobutadiene	ND	0.50		mg/L	1	2/16/2016 1:15:23 PM	23755
Hexachloroethane	ND	3.0		mg/L	1	2/16/2016 1:15:23 PM	23755
Nitrobenzene	ND	2.0		mg/L	1	2/16/2016 1:15:23 PM	23755
Pentachlorophenol	ND	100		mg/L	1	2/16/2016 1:15:23 PM	23755
Pyridine	ND	5.0		mg/L	1	2/16/2016 1:15:23 PM	23755
2,4,5-Trichlorophenol	ND	400		mg/L	1	2/16/2016 1:15:23 PM	23755
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	2/16/2016 1:15:23 PM	23755
Cresols, Total	ND	200		mg/L	1	2/16/2016 1:15:23 PM	23755
Surr: 2-Fluorophenol	77.0	19-121		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: Phenol-d5	71.4	31.8-117		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: 2,4,6-Tribromophenol	98.6	31.3-139		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: Nitrobenzene-d5	88.9	48.2-128		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: 2-Fluorobiphenyl	89.8	58.4-114		%Rec	1	2/16/2016 1:15:23 PM	23755
Surr: 4-Terphenyl-d14	96.5	17.4-141		%Rec	1	2/16/2016 1:15:23 PM	23755
VOLATILES BY 8260B/1311							Analyst: DJF
Benzene	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
2-Butanone	ND	200		mg/L	1	2/12/2016 2:06:32 PM	23698
Carbon Tetrachloride	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
Chlorobenzene	ND	100		mg/L	1	2/12/2016 2:06:32 PM	23698
Chloroform	ND	6.0		mg/L	1	2/12/2016 2:06:32 PM	23698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	2/12/2016 2:06:32 PM	23698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
1,1-Dichloroethene	ND	0.70		mg/L	1	2/12/2016 2:06:32 PM	23698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1602354

Date Reported: 2/17/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Tank 714 FCC Product

Project: Tank 714 FCC Feed Spill

Collection Date: 2/8/2016 4:25:00 PM

Lab ID: 1602354-002

Matrix: SOIL

Received Date: 2/9/2016 3:22:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
VOLATILES BY 8260B/1311							Analyst: DJF
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	2/12/2016 2:06:32 PM	23698
Trichloroethene (TCE)	ND	0.50		mg/L	1	2/12/2016 2:06:32 PM	23698
Vinyl chloride	ND	0.20		mg/L	1	2/12/2016 2:06:32 PM	23698
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698
Surr: Dibromofluoromethane	101	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698
Surr: Toluene-d8	101	70-130		%Rec	1	2/12/2016 2:06:32 PM	23698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



Trust our People. Trust our Data.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B16020920-001
Client Sample ID: 1602354-001B, Tank 714 FCC Feed Spill

Report Date: 02/17/16
Collection Date: 02/08/16 13:00
Date Received: 02/11/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
IGNITABILITY							
Flash Point (Ignitability)	>200	°F		30		SW1010M	02/12/16 13:30 / jh
CORROSIVITY							
pH of Soil and Waste	8.1	s.u.		0.1		SW9045D	02/12/16 10:26 / jh
REACTIVITY							
Cyanide, Reactive	ND	mg/kg		0.05	250	SW846 Ch 7	02/16/16 16:09 / jpv
Sulfide, Reactive	ND	mg/kg		20	500	SW846 Ch 7	02/12/16 12:05 / jh

Report
Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Trust our People. Trust our Data.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515

College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B16020920-002
Client Sample ID: 1602354-002B, Tank 714 FCC Product

Report Date: 02/17/16
Collection Date: 02/08/16 16:25
Date Received: 02/11/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
IGNITABILITY							
Flash Point (Ignitability)	>200	°F		30		SW1010M	02/12/16 13:30 / jh
CORROSIVITY							
pH of Soil and Waste	7.2	s.u.		0.1		SW9045D	02/12/16 10:26 / jh
REACTIVITY							
Cyanide, Reactive	ND	mg/kg		0.05	250	SW846 Ch 7	02/16/16 16:17 / jpv
Sulfide, Reactive	ND	mg/kg		20	500	SW846 Ch 7	02/12/16 12:05 / jh

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



Trust our People. Trust our Data.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515

College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Report Date: 02/17/16

Project: Not Indicated

Work Order: B16020920

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW1010M							Batch: R256485		
Lab ID: LCS-R256485	Laboratory Control Sample				Run: PENSKEY MARTEN CLOSED				02/12/16 13:30
Flash Point (Ignitability)	88.0	°F	30	98	98	102			
Lab ID: LCSDUP-R256485	Laboratory Control Sample Duplicate				Run: PENSKEY MARTEN CLOSED				02/12/16 13:30
Flash Point (Ignitability)	88.0	°F	30	98	98	102			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515

College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Report Date: 02/17/16

Project: Not Indicated

Work Order: B16020920

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW846 Ch 7 Batch: 96345									
Lab ID: LCS-96345	Laboratory Control Sample				Run: REACTIVE SULFIDE/CYANID		01/20/16 15:00		
Sulfide, Reactive	34	mg/kg	20	109	70	130			
Lab ID: B16011154-001ADUP	Sample Duplicate				Run: REACTIVE SULFIDE/CYANID		01/20/16 15:00		
Sulfide, Reactive	ND	mg/kg	20					10	
Method: SW846 Ch 7 Batch: 96345									
Lab ID: MB-96345	Method Blank				Run: REACTIVE SULFIDE/CYANID		02/12/16 12:05		
Sulfide, Reactive	ND	mg/kg	10						
Method: SW846 Ch 7 Batch: 96345									
Lab ID: MB-96345	Method Blank				Run: SFA-201-B_160216A		02/16/16 16:06		
Cyanide, Reactive	ND	mg/kg	0.05						
Lab ID: B16020920-001AMS	Sample Matrix Spike				Run: SFA-201-B_160216A		02/16/16 16:11		
Cyanide, Reactive	0.11	mg/kg	0.050	108	80	120			
Lab ID: B16020920-001AMSD	Sample Matrix Spike Duplicate				Run: SFA-201-B_160216A		02/16/16 16:14		
Cyanide, Reactive	0.11	mg/kg	0.050	106	80	120	2.2	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.

Billings, MT 800.735.4489 • Casper, WY 888.235.0515

College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Report Date: 02/17/16

Project: Not Indicated

Work Order: B16020920

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW9045D		Analytical Run: ORION 720A HZW_160212A							
Lab ID: ICV	Initial Calibration Verification Standard								02/12/16 10:26
pH of Soil and Waste	7.96	s.u.	0.10	100	98	102			
Method: SW9045D		Batch: R256459							
Lab ID: B16020920-001ADUP	Sample Duplicate								02/12/16 10:26
pH of Soil and Waste	8.34	s.u.	0.10				2.6	3	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	mb-23666		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	23666		RunNo:	32086			
Prep Date:	2/10/2016		Analysis Date:	2/11/2016		SeqNo:	980986		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.8	70	130			
Surr: 4-Bromofluorobenzene	0.56		0.5000		112	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.6	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID	lcs-23666		SampType:	LCS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	LCSS		Batch ID:	23666		RunNo:	32086			
Prep Date:	2/10/2016		Analysis Date:	2/11/2016		SeqNo:	980987		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.050	1.000	0	96.1	70	130			
Chlorobenzene	1.0	0.050	1.000	0	103	70	130			
1,1-Dichloroethene	0.80	0.050	1.000	0	80.1	70	130			
Trichloroethene (TCE)	0.94	0.050	1.000	0	93.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		89.3	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		109	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.3	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID	1602354-001ams		SampType:	MS		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	Tank 714 FCC Feed		Batch ID:	23666		RunNo:	32086			
Prep Date:	2/10/2016		Analysis Date:	2/11/2016		SeqNo:	980989		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.50	1.000	0.2086	91.9	70	130			
Chlorobenzene	0.97	0.50	1.000	0	97.0	70	130			
1,1-Dichloroethene	0.83	0.50	1.000	0	83.0	72.6	149			
Trichloroethene (TCE)	0.94	0.50	1.000	0	94.4	62.4	139			
Surr: 1,2-Dichloroethane-d4	4.8		5.000		95.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	1602354-001ams	SampType:	MS	TestCode:	EPA Method 8260B: TCLP Compounds					
Client ID:	Tank 714 FCC Feed	Batch ID:	23666	RunNo:	32086					
Prep Date:	2/10/2016	Analysis Date:	2/11/2016	SeqNo:	980989	Units:	ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	5.0		5.000		101	70	130			
Surr: Dibromofluoromethane	5.1		5.000		101	70	130			
Surr: Toluene-d8	5.1		5.000		101	70	130			

Sample ID	1602354-001amsd	SampType:	MSD	TestCode: EPA Method 8260B: TCLP Compounds						
Client ID:	Tank 714 FCC Feed	Batch ID:	23666	RunNo: 32086						
Prep Date:	2/10/2016	Analysis Date:	2/11/2016	SeqNo: 980990			Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.50	1.000	0.2086	98.7	70	130	5.83	20	
Chlorobenzene	0.96	0.50	1.000	0	96.3	70	130	0.776	20	
1,1-Dichloroethene	0.86	0.50	1.000	0	86.5	72.6	149	4.14	20	
Trichloroethene (TCE)	1.0	0.50	1.000	0	100	62.4	139	6.15	20	
Surr: 1,2-Dichloroethane-d4	4.8		5.000		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	5.5		5.000		110	70	130	0	0	
Surr: Dibromofluoromethane	5.0		5.000		100	70	130	0	0	
Surr: Toluene-d8	5.1		5.000		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	mb-23698	SampType:	MBLK	TestCode:	Volatiles by 8260B/1311
Client ID:	PBS	Batch ID:	23698	RunNo:	32125
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982302
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	200								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		94.0	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.2000		106	70	130			
Surr: Dibromofluoromethane	0.20		0.2000		98.8	70	130			
Surr: Toluene-d8	0.20		0.2000		99.9	70	130			

Sample ID	lcs-23698	SampType:	LCS	TestCode:	Volatiles by 8260B/1311
Client ID:	LCSS	Batch ID:	23698	RunNo:	32125
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982303
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.41	0.30	0.4000	0	104	70	130			
Chlorobenzene	0.42	0.30	0.4000	0	104	70	130			
1,1-Dichloroethene	0.40	0.30	0.4000	0	98.8	63.8	148			
Trichloroethene (TCE)	0.40	0.30	0.4000	0	99.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.2000		105	70	130			
Surr: Dibromofluoromethane	0.19		0.2000		96.9	70	130			
Surr: Toluene-d8	0.19		0.2000		93.3	70	130			

Sample ID	1602354-002ams	SampType:	MS	TestCode:	Volatiles by 8260B/1311
Client ID:	Tank 714 FCC Prod	Batch ID:	23698	RunNo:	32125
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982305
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.45	0.30	0.3998	0	112	70	130			
Chlorobenzene	0.44	0.30	0.3998	0	110	70	130			
1,1-Dichloroethene	0.41	0.30	0.3998	0	101	89	129			
Trichloroethene (TCE)	0.42	0.30	0.3998	0	105	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	1602354-002ams		SampType: MS		TestCode: Volatiles by 8260B/1311					
Client ID:	Tank 714 FCC Prod		Batch ID: 23698		RunNo: 32125					
Prep Date:	2/11/2016		Analysis Date: 2/12/2016		SeqNo: 982305		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.19		0.1999		93.8	70	130			
Surr: 4-Bromofluorobenzene	0.21		0.1999		106	70	130			
Surr: Dibromofluoromethane	0.19		0.1999		97.0	70	130			
Surr: Toluene-d8	0.20		0.1999		97.8	70	130			

Sample ID	1602354-002amsd	SampType: MSD			TestCode: Volatiles by 8260B/1311					
Client ID:	Tank 714 FCC Prod	Batch ID: 23698			RunNo: 32125					
Prep Date:	2/11/2016	Analysis Date: 2/12/2016			SeqNo: 982306		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.43	0.30	0.3998	0	107	70	130	4.66	20	
Chlorobenzene	0.43	0.30	0.3998	0	109	70	130	1.64	20	
1,1-Dichloroethene	0.40	0.30	0.3998	0	100	89	129	1.23	20	
Trichloroethene (TCE)	0.41	0.30	0.3998	0	102	70	130	2.52	20	
Surr: 1,2-Dichloroethane-d4	0.18		0.1999		91.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.21		0.1999		105	70	130	0	0	
Surr: Dibromofluoromethane	0.19		0.1999		95.3	70	130	0	0	
Surr: Toluene-d8	0.20		0.1999		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	mb-23755	SampType:	MBLK	TestCode:	EPA Method 8270C TCLP
Client ID:	PBS	Batch ID:	23755	RunNo:	32177
Prep Date:	2/16/2016	Analysis Date:	2/16/2016	SeqNo:	983657
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.20		0.2000		98.1	19	121			
Surr: Phenol-d5	0.19		0.2000		95.9	31.8	117			
Surr: 2,4,6-Tribromophenol	0.20		0.2000		99.2	31.3	139			
Surr: Nitrobenzene-d5	0.092		0.1000		92.5	48.2	128			
Surr: 2-Fluorobiphenyl	0.099		0.1000		98.9	58.4	114			
Surr: 4-Terphenyl-d14	0.12		0.1000		116	17.4	141			

Sample ID	lcs-23755	SampType:	LCS	TestCode:	EPA Method 8270C TCLP
Client ID:	LCSS	Batch ID:	23755	RunNo:	32177
Prep Date:	2/16/2016	Analysis Date:	2/16/2016	SeqNo:	983658
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.090	0.010	0.1000	0	90.1	37.6	110			
3+4-Methylphenol	0.22	0.010	0.2000	0	110	30.5	149			
2,4-Dinitrotoluene	0.077	0.010	0.1000	0	76.8	24.9	93.7			
Hexachlorobenzene	0.096	0.010	0.1000	0	96.0	40	114			
Hexachlorobutadiene	0.099	0.010	0.1000	0	98.5	37.4	119			
Hexachloroethane	0.087	0.010	0.1000	0	87.4	33.8	105			
Nitrobenzene	0.098	0.010	0.1000	0	98.1	33.4	115			
Pentachlorophenol	0.072	0.010	0.1000	0	72.1	27.9	90.3			
Pyridine	0.083	0.010	0.1000	0	82.9	29.3	105			
2,4,5-Trichlorophenol	0.098	0.010	0.1000	0	98.3	34	118			
2,4,6-Trichlorophenol	0.098	0.010	0.1000	0	98.1	34.1	109			
Cresols, Total	0.31	0.010	0.3000	0	104	30	136			
Surr: 2-Fluorophenol	0.17		0.2000		86.4	19	121			
Surr: Phenol-d5	0.18		0.2000		89.8	31.8	117			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	lcs-23755		SampType: LCS	TestCode: EPA Method 8270C TCLP						
Client ID:	LCSS		Batch ID: 23755	RunNo: 32177						
Prep Date:	2/16/2016		Analysis Date: 2/16/2016	SeqNo: 983658		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.21		0.2000		104	31.3	139			
Surr: Nitrobenzene-d5	0.094		0.1000		94.2	48.2	128			
Surr: 2-Fluorobiphenyl	0.088		0.1000		87.7	58.4	114			
Surr: 4-Terphenyl-d14	0.090		0.1000		90.0	17.4	141			

Sample ID	1602354-001ams		SampType: MS	TestCode: EPA Method 8270C TCLP						
Client ID:	Tank 714 FCC Feed		Batch ID: 23755	RunNo: 32177						
Prep Date:	2/16/2016		Analysis Date: 2/16/2016	SeqNo: 983661		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.10	0.010	0.1000	0	105	43.1	114			
3+4-Methylphenol	0.25	0.010	0.2000	0	126	37.8	128			
2,4-Dinitrotoluene	0.090	0.010	0.1000	0	90.4	36.5	125			
Hexachlorobenzene	0.11	0.010	0.1000	0	110	41.4	108			S
Hexachlorobutadiene	0.095	0.010	0.1000	0	95.4	30.4	101			
Hexachloroethane	0.091	0.010	0.1000	0	90.9	37.3	115			
Nitrobenzene	0.10	0.010	0.1000	0	102	40.2	132			
Pentachlorophenol	0.082	0.010	0.1000	0	81.6	8.72	103			
Pyridine	0.086	0.010	0.1000	0	86.3	9.36	106			
2,4,5-Trichlorophenol	0.12	0.010	0.1000	0	116	16.5	123			
2,4,6-Trichlorophenol	0.11	0.010	0.1000	0	112	11.3	117			
Cresols, Total	0.36	0.010	0.3000	0	119	23.2	151			
Surr: 2-Fluorophenol	0.18		0.2000		87.6	19	121			
Surr: Phenol-d5	0.16		0.2000		79.1	31.8	117			
Surr: 2,4,6-Tribromophenol	0.24		0.2000		118	31.3	139			
Surr: Nitrobenzene-d5	0.11		0.1000		105	48.2	128			
Surr: 2-Fluorobiphenyl	0.10		0.1000		104	58.4	114			
Surr: 4-Terphenyl-d14	0.12		0.1000		123	17.4	141			

Sample ID	1602354-001amsd		SampType: MSD	TestCode: EPA Method 8270C TCLP						
Client ID:	Tank 714 FCC Feed		Batch ID: 23755	RunNo: 32177						
Prep Date:	2/16/2016		Analysis Date: 2/16/2016	SeqNo: 983662		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.079	0.010	0.1000	0	79.0	43.1	114	28.2	28.4	
3+4-Methylphenol	0.18	0.010	0.2000	0	88.0	37.8	128	35.5	29.4	R
2,4-Dinitrotoluene	0.076	0.010	0.1000	0	76.1	36.5	125	17.2	24.7	
Hexachlorobenzene	0.092	0.010	0.1000	0	91.9	41.4	108	17.7	20	
Hexachlorobutadiene	0.079	0.010	0.1000	0	78.8	30.4	101	19.2	29	
Hexachloroethane	0.073	0.010	0.1000	0	72.8	37.3	115	22.1	25.2	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	1602354-001amsd	SampType: MSD		TestCode: EPA Method 8270C TCLP						
Client ID:	Tank 714 FCC Feed	Batch ID: 23755		RunNo: 32177						
Prep Date:	2/16/2016	Analysis Date: 2/16/2016		SeqNo: 983662		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	0.082	0.010	0.1000	0	81.8	40.2	132	21.8	26.9	
Pentachlorophenol	ND	0.010	0.1000	0	0	8.72	103	200	59.2	RS
Pyridine	0.063	0.010	0.1000	0	63.2	9.36	106	30.9	48	
2,4,5-Trichlorophenol	0.019	0.010	0.1000	0	18.8	16.5	123	144	70.8	R
2,4,6-Trichlorophenol	ND	0.010	0.1000	0	0	11.3	117	200	78	RS
Cresols, Total	0.26	0.010	0.3000	0	85.0	23.2	151	33.3	30.8	R
Surr: 2-Fluorophenol	0.021		0.2000		10.7	19	121	0	0	S
Surr: Phenol-d5	0.080		0.2000		40.0	31.8	117	0	0	
Surr: 2,4,6-Tribromophenol	0.032		0.2000		16.1	31.3	139	0	0	S
Surr: Nitrobenzene-d5	0.086		0.1000		85.7	48.2	128	0	0	
Surr: 2-Fluorobiphenyl	0.088		0.1000		88.1	58.4	114	0	0	
Surr: 4-Terphenyl-d14	0.10		0.1000		100	17.4	141	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	MB-23694	SampType:	MBLK	TestCode:	MERCURY, TCLP					
Client ID:	PBW	Batch ID:	23694	RunNo:	32124					
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982123	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.020								

Sample ID	LCS-23694	SampType: LCS			TestCode: MERCURY, TCLP					
Client ID:	LCSW	Batch ID: 23694			RunNo: 32124					
Prep Date:	2/11/2016	Analysis Date: 2/12/2016			SeqNo: 982124		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	105	80	120			

Sample ID	1602354-001AMS	SampType:	ms	TestCode:	MERCURY, TCLP					
Client ID:	Tank 714 FCC Feed	Batch ID:	23694	RunNo:	32124					
Prep Date:	2/11/2016	Analysis Date:	2/12/2016	SeqNo:	982126	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	106	75	125			

Sample ID	1602354-001AMSD			SampType:	msd		TestCode:	MERCURY, TCLP			
Client ID:	Tank 714 FCC Feed		Batch ID:	23694		RunNo:	32124				
Prep Date:	2/11/2016		Analysis Date:	2/12/2016		SeqNo:	982127		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	103	75	125	0	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602354

17-Feb-16

Client: Western Refining Southwest, Gallup

Project: Tank 714 FCC Feed Spill

Sample ID	MB-23696	SampType: MBLK			TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW	Batch ID: 23696			RunNo: 32097					
Prep Date:	2/11/2016	Analysis Date: 2/12/2016			SeqNo: 981255		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-23696	SampType: LCS			TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW	Batch ID: 23696			RunNo: 32097					
Prep Date:	2/11/2016	Analysis Date: 2/12/2016			SeqNo: 981256		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	110	80	120			
Barium	ND	100	0.5000	0	98.7	80	120			
Cadmium	ND	1.0	0.5000	0	103	80	120			
Chromium	ND	5.0	0.5000	0	99.1	80	120			
Lead	ND	5.0	0.5000	0	101	80	120			
Selenium	ND	1.0	0.5000	0	112	80	120			
Silver	ND	5.0	0.1000	0	106	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hopkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1602354

RcptNo: 1

Received by/date: AR 02/09/16

Logged By: Anne Thorne 2/9/2016 3:22:00 PM

Anne Thorne

Completed By: Anne Thorne 2/10/2016

Anne Thorne

Reviewed By: JD 02/10/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present ☐
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

18. Cooler Information





Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Yes			

Chain-of-Custody Record				Turn-Around Time:	
Client: Western - Refining		Gallup Refinery		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Mailing Address: 92 GIANT CROSSING ROAD		Gallup NM 87301		Project Name: Tank 714 FCC Feed Spill	
Phone #: 505 722 3833		email or Fax#: 505 863 0930		Project #: Tank 714 FCC Feed Spill	
QAV/QC Package:		<input type="checkbox"/> Standard <input type="checkbox"/> Other _____ <input type="checkbox"/> EDD (Type) _____		Project Manager: PO # 20825281 Beck Larsen	
<input type="checkbox"/> Level 4 (Full Validation)		Sampler: CTI/JG		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Sample Temperature: 49	

4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107
www.hallenvironmental.com

Phone #:	505	722	3833	Tank 714: FCC Feed Spill
email or Fax#:	505	863	0930	Project Manager:
QA/QC Package:	PO # 20825281			
<input type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)			
<input type="checkbox"/> Other	Beck Larsen			
<input type="checkbox"/> EDD (Type)	Sampler: CTI/JG			
On Ice:				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Temperature				24.9

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	TCLP VOA	TCP SEMI V	RCI	RCRA-8 Me	Air Bubbles (
2/8/2016	13:00	Soil	02/09/16 Tank 714 FCC Feed Spill	9 oz-1		1002354	X	X	X	X	
2/8/2016	13:05		Tank 714 FCC Feed Spill	9 oz-1		100	X	X	X	X	
2/8/2016	13:08		Tank 714 FCC Feed Spill	9 oz-1		100	X	X	X	X	
2/8/2016	13:10		Tank 714 FCC Feed Spill	9 oz-1		100	X	X	X	X	
2/8/2016	13:12		Tank 714 FCC Feed Spill	9 oz-1		100	X	X	X	X	
2/8/2016	13:15		Tank 714 FCC Feed Spill	9 oz-1		100	X	X	X	X	
2/8/2016	16:25	Dil	Tank 714 FCC Product	9 oz-1		1002	X	X	X	X	
2/8/2016	16:28		Tank 714 FCC Product	9 oz-1		1002	X	X	X	X	
2/8/2016	16:30		Tank 714 FCC Product	9 oz-1		1002	X	X	X	X	
2/8/2016	16:32		Tank 714 FCC Product	9 oz-1		1002	X	X	X	X	
2/8/2016	16:35		Tank 714 FCC Product	9 oz-1		1002	X	X	X	X	
2/8/2016	16:38		Tank 714 FCC Product	9 oz-1		1002	X	X	X	X	

Date: 02-09-16	Time: 14:00	Relinquished by: 	Received by: 	Date 2/9/16	Time 1400
Date: 1/9/16	Time: 15:22	Relinquished by: 	Received by: 	Date 02/09/16	Time 1522

Dev BL 2 Samples / A70211014

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: WESTERN REFINING	Contact: Alvin Dorsey	
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No. (505) 722-0211	
Facility Name: WESTERN RENINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery	
Surface Owner	Mineral Owner	API No.


LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15 N	15 W					MCKINLEY

Latitude 35° 029' 028.97" N Longitude 108° 025' 035.34" W

NATURE OF RELEASE

Type of Release: ULSD (Ultra-low Sulfur Diesel)	Volume of Release 1414 gallons (34 bbls)	Volume Recovered: 1250-1350 gallons (30 – 32 bbls)
Source of Release: Tank 583 USLD Sandpiper pump cracked on pump case.	Date and Hour of Occurrence 01-02-16 ; 2040 hrs	Date and Hour of Discovery 01-02-16 ; 2040 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD (C. Chavez)(msg)/NMED HWB (Kristen Van Horn)(Ruth Horowitz)(msg)	
By Whom? Alvin Dorsey	Date and Hour: 01-03-16 15:30	
Was a Watercourse Reach <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* On January 2, 2016 at 8:40 PM (2040 hrs) while Off-site personnel was making his rounds, he discovered the sandpiper pump for the distillate rundown line going to T-583 was leaking product to the ground surface from a cracked casing. All liquid was contained within an earthen dike within the tank farm. The line was immediately blocked in. It was estimated that 34 bbls of product was spilled to the ground surface. Maintenance and the Environmental on-call personnel were notified. The onsite vacuum truck began removing liquid from the contaminated area. The vacuum truck recovered about 1250 to 1350 gallons (30 to 32 bbls) of liquid from the area.		
Describe Area Affected and Cleanup Action Taken.* The estimated extent of the ULSD contamination has a surface area of about 4032 sq. ft. Clean up operation began by removing the contaminated soil around T-583 and placing it in several lined roll-off boxes pending disposal. Once the soil have been properly removed and determined that the clean-up is completed, confirmation soil samples will be collected and sent to an outside laboratory for analysis. The results of these analyses will determine if further cleanup action will be required.		

Signature: 	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Beck Larsen:	Approved by Environmental Specialist:		
Title: Environmental Engineer	Approval Date:	Expiration Date:	
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 2/2/2016	Phone: (505) 722-0258		

* Attach Additional Sheets If Necessary



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

**2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov**



RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

December 15, 2015

Mr. Ed Riege
Environmental Manager
Western Refining, Southwest Inc., Gallup Refinery
92 Giant Crossing Road
Gallup, New Mexico 87301

**RE: DISAPPROVAL
OW-14 SOURCE AREA INVESTIGATION WORK PLAN
OW SERIES WELLS AND CONTAMINANT PLUME MIGRATION
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-15-005**

Dear Mr. Riege:

The New Mexico Environment Department (NMED) has reviewed Western Refining Southwest Inc., Gallup Refinery's (Permittee) *OW-14 Source Area Investigation Work Plan OW Series Wells and Contaminant Plume Migration* (Work Plan), dated September 2015, and hereby issues this Disapproval. The Permittee must address the following comments before NMED can complete its review of the Work Plan. NMED is available to discuss potential investigative options prior to submittal of the revised Work Plan.

Comment 1

The Permittee submitted the Work Plan as an unbound document. Although there are no formal requirements to bind submittals, NMED prefers submittal of bound documents to facilitate placement and storage in the Hazardous Waste Bureau library.

Mr. Riege
Gallup Refinery
December 15, 2015
Page 2

Comment 2

Installation of two monitoring wells may not be sufficient to investigate the potential source(s) of contamination as required by NMED's May 11, 2015 letter. Please propose soil boring locations in addition to the installation of two monitoring wells in order to locate the potential source(s) of contamination in groundwater. The Permittee is required to propose an investigation that provides accurate data for the evaluation of site conditions, the nature and extent of contamination, and contaminant migration. The proposed investigation must attempt to define the extent of the contaminant plume in groundwater as well as evaluate soils for potential contamination. Revise the Work Plan to propose additional soil borings (where practicable), near or within the Tank Farm to define the nature and extent of contamination.

The Permittee must address both comments in this Disapproval and submit a revised Work Plan. In addition to the revised Work Plan, please include a red-line strikeout version in electronic format showing where all revisions have been made to the Work Plan. The revised Work Plan must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The revised Work Plan must be submitted to NMED no later than **April 19, 2016**.

If you have questions regarding this Disapproval, please contact Kristen Van Horn of my staff at 505-476-6046.

Sincerely,



John E. Kielling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
K. Van Horn, NMED HWB
C. Chavez, EMNRD OCD
A. Hains, WRG
L. King, EPA

File: Reading File and WRG 2015 File
WRG-15-005

Chavez, Carl J, EMNRD

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Friday, August 15, 2014 11:31 AM
To: VanHorn, Kristen, NMENV; Chavez, Carl J, EMNRD
Cc: Riege, Ed; james.paul@epa.gov
Subject: C-141 Initial Report for the Sewer Water Release at the WWTP for August 5, 2014.
Attachments: C141 INIT- Sewer Water Release at WWTP.pdf

Dear Kristen,

The above attachment is the C-141 Initial Report for the Sewer Water Release at the WWTP that occurred on August 5, 2014. Please let me know if you have any questions.

Sincerely,

Beck Larsen
Environmental Engineer
Western Refining Southwest (Gallup Refinery)
92 Giant Crossing Road - New Mailing Address
Gallup, NM 87301
Office: (505) 722-0258
cell: (505) 862-1749

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: WESTERN REFINING	Contact: Beck Larsen
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No. (505) 722-0258
Facility Name: WESTERN REFINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	API No.
---------------	---------------	---------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15 N	15 W					MCKINLEY

Latitude 35° 02' 02" Longitude 108° 02' 02"

NATURE OF RELEASE


Type of Release: Dirty Sewer Water	Volume of Release: Oil-14 bbls	Volume Recovered: Oil- 14 bbls
Source of Release: Secondary Baker Frac Tanks at WWTP	Date and Hour of Occurrence 8/5/14 @ 1405 hrs	Date and Hour of Discovery 8/5/14 @ 1405 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD (C. Chavez) / NMED HWB (Kristen Van Horn)	
By Whom? Beck Larsen	Date and Hour: 8/6/14 C. Chavez @1335 hrs / K. Van Horn @ 1345 hrs	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.* At approximately 1405 hours, Oily Sewer Water from the DFG Filter press overflowed the secondary Baker Frac Tank at the WWTP. The overflow lasted for about 5 minutes. The filter press was shut down and a valve to the DGF Feed tank was open wider to allow more flow to the tank. The oily water overflowed the secondary containment of the secondary Baker frac tank, went to a storm drain, flowed down the drain to a metal culvert until it reached a stormwater conveyance (ditch), and continued to flow. Once the environmental Department was notified an onsite contractor began to berm the stormwater ditch in several locations in order to reduce the contamination area. A vacuum truck began cleanup operations.

Describe Area Affected and Cleanup Action Taken.* A vacuum truck began cleanup operations. The extent of the contamination along the stormwater conveyance was estimated to be < 1/2 mile on western property. The liquid recovered consisted of partially standing rainwater from a previous rainfall in the ditches and the oily sewer water from the Baker tank overflow. The impacted soil around the Baker Tank and storm drain was excavated and removed for shipment offsite. The metal culvert was flushed with water to remove any residual oil. Floating oil was also removed from conveyance ditch. Samples were collected in order to determine the extent of penetration of the oil and to determine the amount of cleanup that is required. The initial cleanup has been completed pending analytical results.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOC marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOC acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Beck Larsen:	Approved by Environmental Specialist:		
Title: Environmental Engineer	Approval Date:	Expiration Date:	
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 8/15/2014 Phone: (505) 722-0258			

* Attach Additional Sheets If Necessary



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 15, 2014

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: WWTP Baker Tank Overflow

OrderNo.: 1408348

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/7/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/5/2014 7:25:00 PM

Lab ID: 1408348-001

Matrix: PRODUCT

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
GRO BY 8015D							Analyst: NSB
Gasoline Range Organics (GRO)	11	2.5		wt%	1	8/13/2014 1:26:49 AM	14675
Surr: BFB	137	75.3-119	S	%REC	1	8/13/2014 1:26:49 AM	14675
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	50		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Toluene	760	100		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Ethylbenzene	880	100		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Xylenes, Total	6700	200		mg/Kg	40	8/13/2014 3:07:56 PM	14675
Surr: 4-Bromofluorobenzene	126	76.8-126	S	%REC	40	8/13/2014 3:07:56 PM	14675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** WWTP Dirty Sewer Spill**Project:** WWTP Baker Tank Overflow**Collection Date:** 8/6/2014 4:10:00 PM**Lab ID:** 1408348-002**Matrix:** PRODUCT**Received Date:** 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
GRO BY 8015D							Analyst: NSB
Gasoline Range Organics (GRO)	ND	2.5		wt%	1	8/13/2014 2:24:05 AM	14707
Surr: BFB	94.6	75.3-119		%REC	1	8/13/2014 2:24:05 AM	14707
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	50		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Toluene	ND	100		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Ethylbenzene	ND	100		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Xylenes, Total	ND	200		mg/Kg	40	8/13/2014 3:36:35 PM	14707
Surr: 4-Bromofluorobenzene	109	76.8-126		%REC	40	8/13/2014 3:36:35 PM	14707

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #1 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 3:30:00 PM

Lab ID: 1408348-003

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Surr: BFB	94.0	80-120		%REC	1	8/11/2014 5:56:02 PM	14669
EPA METHOD 8021B: VOLATILES							Analyst: DJF
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Xylenes, Total	ND	0.10		mg/Kg	1	8/11/2014 5:56:02 PM	14669
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/11/2014 5:56:02 PM	14669
MERCURY, TCLP							Analyst: MMD
Mercury	ND	0.020		mg/L	1	8/13/2014 3:25:24 PM	14746
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:48:30 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:48:30 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:48:30 PM	14750
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 10:09:49 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 10:09:49 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 10:09:49 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 10:09:49 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 10:09:49 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 10:09:49 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 10:09:49 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 10:09:49 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 10:09:49 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 10:09:49 AM	14725
Surr: 2-Fluorophenol	72.6	25-105		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: Phenol-d5	55.5	22.3-70.3		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: 2,4,6-Tribromophenol	80.7	30.4-134		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: Nitrobenzene-d5	114	54.8-128		%REC	1	8/14/2014 10:09:49 AM	14725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #1 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 3:30:00 PM

Lab ID: 1408348-003

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: 2-Fluorobiphenyl	121	53.3-122		%REC	1	8/14/2014 10:09:49 AM	14725
Surr: 4-Terphenyl-d14	102	51.8-133		%REC	1	8/14/2014 10:09:49 AM	14725
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: KJH
Benzene	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
2-Butanone	ND	200		ppm	10	8/12/2014 6:20:33 PM	14669
Carbon tetrachloride	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
Chlorobenzene	ND	100		ppm	10	8/12/2014 6:20:33 PM	14669
Chloroform	ND	6.0		ppm	10	8/12/2014 6:20:33 PM	14669
1,4-Dichlorobenzene	ND	7.5		ppm	10	8/12/2014 6:20:33 PM	14669
1,1-Dichloroethene	ND	0.70		ppm	10	8/12/2014 6:20:33 PM	14669
Tetrachloroethene (PCE)	ND	0.70		ppm	10	8/12/2014 6:20:33 PM	14669
Trichloroethene (TCE)	ND	0.50		ppm	10	8/12/2014 6:20:33 PM	14669
Vinyl chloride	ND	0.20		ppm	10	8/12/2014 6:20:33 PM	14669
mp-Xylenes	ND	0.50		mg/Kg	10	8/12/2014 6:20:33 PM	14669
o-Xylene	ND	0.50		mg/Kg	10	8/12/2014 6:20:33 PM	14669
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	10	8/12/2014 6:20:33 PM	14669
Surr: 4-Bromofluorobenzene	89.2	70-130		%REC	10	8/12/2014 6:20:33 PM	14669
Surr: Dibromofluoromethane	96.1	70-130		%REC	10	8/12/2014 6:20:33 PM	14669
Surr: Toluene-d8	94.0	70-130		%REC	10	8/12/2014 6:20:33 PM	14669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #2 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 1:40:00 PM

Lab ID: 1408348-004

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Surr: BFB	92.5	80-120		%REC	1	8/11/2014 6:53:24 PM	14669
EPA METHOD 8021B: VOLATILES							Analyst: DJF
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Xylenes, Total	ND	0.10		mg/Kg	1	8/11/2014 6:53:24 PM	14669
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	8/11/2014 6:53:24 PM	14669
MERCURY, TCLP							Analyst: MMD
Mercury	ND	0.020		mg/L	1	8/13/2014 3:30:42 PM	14746
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:49:45 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:49:45 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:49:45 PM	14750
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 10:38:43 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 10:38:43 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 10:38:43 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 10:38:43 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 10:38:43 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 10:38:43 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 10:38:43 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 10:38:43 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 10:38:43 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 10:38:43 AM	14725
Surr: 2-Fluorophenol	24.2	25-105	S	%REC	1	8/14/2014 10:38:43 AM	14725
Surr: Phenol-d5	33.1	22.3-70.3		%REC	1	8/14/2014 10:38:43 AM	14725
Surr: 2,4,6-Tribromophenol	30.2	30.4-134	S	%REC	1	8/14/2014 10:38:43 AM	14725
Surr: Nitrobenzene-d5	105	54.8-128		%REC	1	8/14/2014 10:38:43 AM	14725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #2 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 1:40:00 PM

Lab ID: 1408348-004

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: 2-Fluorobiphenyl	101	53.3-122		%REC	1	8/14/2014 10:38:43 AM	14725
Surr: 4-Terphenyl-d14	84.0	51.8-133		%REC	1	8/14/2014 10:38:43 AM	14725
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: KJH
Benzene	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
2-Butanone	ND	200		ppm	10	8/12/2014 6:48:31 PM	14669
Carbon tetrachloride	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
Chlorobenzene	ND	100		ppm	10	8/12/2014 6:48:31 PM	14669
Chloroform	ND	6.0		ppm	10	8/12/2014 6:48:31 PM	14669
1,4-Dichlorobenzene	ND	7.5		ppm	10	8/12/2014 6:48:31 PM	14669
1,1-Dichloroethene	ND	0.70		ppm	10	8/12/2014 6:48:31 PM	14669
Tetrachloroethene (PCE)	ND	0.70		ppm	10	8/12/2014 6:48:31 PM	14669
Trichloroethene (TCE)	ND	0.50		ppm	10	8/12/2014 6:48:31 PM	14669
Vinyl chloride	ND	0.20		ppm	10	8/12/2014 6:48:31 PM	14669
mp-Xylenes	ND	0.50		mg/Kg	10	8/12/2014 6:48:31 PM	14669
o-Xylene	ND	0.50		mg/Kg	10	8/12/2014 6:48:31 PM	14669
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	10	8/12/2014 6:48:31 PM	14669
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	10	8/12/2014 6:48:31 PM	14669
Surr: Dibromofluoromethane	96.3	70-130		%REC	10	8/12/2014 6:48:31 PM	14669
Surr: Toluene-d8	92.9	70-130		%REC	10	8/12/2014 6:48:31 PM	14669

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #3 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 3:50:00 PM

Lab ID: 1408348-005

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	50	5.0		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Surr: BFB	211	80-120	S	%REC	1	8/12/2014 1:59:11 PM	14669
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Ethylbenzene	0.14	0.050		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Xylenes, Total	1.8	0.10		mg/Kg	1	8/12/2014 1:59:11 PM	14669
Surr: 4-Bromofluorobenzene	120	80-120		%REC	1	8/12/2014 1:59:11 PM	14669
MERCURY, TCLP							Analyst: MMD
Mercury	ND	0.020		mg/L	1	8/13/2014 3:32:29 PM	14746
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:50:57 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:50:57 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:50:57 PM	14750
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 11:07:49 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 11:07:49 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 11:07:49 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 11:07:49 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 11:07:49 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 11:07:49 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 11:07:49 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 11:07:49 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 11:07:49 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 11:07:49 AM	14725
Surr: 2-Fluorophenol	68.7	25-105		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: Phenol-d5	47.8	22.3-70.3		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: 2,4,6-Tribromophenol	90.8	30.4-134		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: Nitrobenzene-d5	102	54.8-128		%REC	1	8/14/2014 11:07:49 AM	14725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #3 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 3:50:00 PM

Lab ID: 1408348-005

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: 2-Fluorobiphenyl	95.5	53.3-122		%REC	1	8/14/2014 11:07:49 AM	14725
Surr: 4-Terphenyl-d14	86.2	51.8-133		%REC	1	8/14/2014 11:07:49 AM	14725
VOLATILES BY 8260B/1311							Analyst: KJH
Benzene	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
2-Butanone	ND	200		mg/L	1	8/12/2014 2:07:04 PM	14698
Carbon Tetrachloride	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
Chlorobenzene	ND	100		mg/L	1	8/12/2014 2:07:04 PM	14698
Chloroform	ND	6.0		mg/L	1	8/12/2014 2:07:04 PM	14698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/12/2014 2:07:04 PM	14698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
1,1-Dichloroethene	ND	0.70		mg/L	1	8/12/2014 2:07:04 PM	14698
Hexachlorobutadiene	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/12/2014 2:07:04 PM	14698
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/12/2014 2:07:04 PM	14698
Vinyl chloride	ND	0.20		mg/L	1	8/12/2014 2:07:04 PM	14698
Surr: 1,2-Dichloroethane-d4	92.3	69.9-130		%REC	1	8/12/2014 2:07:04 PM	14698
Surr: 4-Bromofluorobenzene	89.2	71.2-123		%REC	1	8/12/2014 2:07:04 PM	14698
Surr: Dibromofluoromethane	94.6	73.9-134		%REC	1	8/12/2014 2:07:04 PM	14698
Surr: Toluene-d8	94.2	81.9-122		%REC	1	8/12/2014 2:07:04 PM	14698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #4 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 4:00:00 PM

Lab ID: 1408348-006

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Surr: BFB	118	80-120		%REC	1	8/12/2014 2:27:53 PM	14669
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Xylenes, Total	ND	0.10		mg/Kg	1	8/12/2014 2:27:53 PM	14669
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	8/12/2014 2:27:53 PM	14669
MERCURY, TCLP							Analyst: MMD
Mercury	ND	0.020		mg/L	1	8/13/2014 3:34:17 PM	14746
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:52:13 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:52:13 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:52:13 PM	14750
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
Phenol	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 11:36:51 AM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 11:36:51 AM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 11:36:51 AM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 11:36:51 AM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 11:36:51 AM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 11:36:51 AM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 11:36:51 AM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 11:36:51 AM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 11:36:51 AM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 11:36:51 AM	14725
Surr: 2-Fluorophenol	80.0	25-105		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: Phenol-d5	54.8	22.3-70.3		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: 2,4,6-Tribromophenol	94.4	30.4-134		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: Nitrobenzene-d5	113	54.8-128		%REC	1	8/14/2014 11:36:51 AM	14725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: *

- E Value exceeds Maximum Contaminant Level.
- J Value above quantitation range
- O Analyte detected below quantitation limits
- R RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH greater than 2.

RL Reporting Detection Limit

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #4 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 4:00:00 PM

Lab ID: 1408348-006

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: 2-Fluorobiphenyl	112	53.3-122		%REC	1	8/14/2014 11:36:51 AM	14725
Surr: 4-Terphenyl-d14	93.2	51.8-133		%REC	1	8/14/2014 11:36:51 AM	14725
VOLATILES BY 8260B/1311							Analyst: KJH
Benzene	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
2-Butanone	ND	200		mg/L	1	8/12/2014 3:31:35 PM	14698
Carbon Tetrachloride	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
Chlorobenzene	ND	100		mg/L	1	8/12/2014 3:31:35 PM	14698
Chloroform	ND	6.0		mg/L	1	8/12/2014 3:31:35 PM	14698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/12/2014 3:31:35 PM	14698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
1,1-Dichloroethene	ND	0.70		mg/L	1	8/12/2014 3:31:35 PM	14698
Hexachlorobutadiene	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/12/2014 3:31:35 PM	14698
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/12/2014 3:31:35 PM	14698
Vinyl chloride	ND	0.20		mg/L	1	8/12/2014 3:31:35 PM	14698
Surr: 1,2-Dichloroethane-d4	93.4	69.9-130		%REC	1	8/12/2014 3:31:35 PM	14698
Surr: 4-Bromofluorobenzene	89.2	71.2-123		%REC	1	8/12/2014 3:31:35 PM	14698
Surr: Dibromofluoromethane	97.5	73.9-134		%REC	1	8/12/2014 3:31:35 PM	14698
Surr: Toluene-d8	92.2	81.9-122		%REC	1	8/12/2014 3:31:35 PM	14698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 P Sample pH greater than 2.
 RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #5 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 4:05:00 PM

Lab ID: 1408348-007

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Surr: BFB	111	80-120		%REC	1	8/12/2014 2:56:33 PM	14669
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Benzene	ND	0.050		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Toluene	ND	0.050		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Ethylbenzene	ND	0.050		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Xylenes, Total	0.35	0.10		mg/Kg	1	8/12/2014 2:56:33 PM	14669
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	8/12/2014 2:56:33 PM	14669
MERCURY, TCLP							Analyst: MMD
Mercury	ND	0.020		mg/L	1	8/13/2014 3:36:06 PM	14746
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Barium	ND	100		mg/L	1	8/14/2014 12:58:13 PM	14750
Cadmium	ND	1.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Chromium	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Lead	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Selenium	ND	1.0		mg/L	1	8/14/2014 12:58:13 PM	14750
Silver	ND	5.0		mg/L	1	8/14/2014 12:58:13 PM	14750
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
3+4-Methylphenol	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
Phenol	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
2,4-Dinitrotoluene	ND	0.13		mg/L	1	8/14/2014 12:05:53 PM	14725
Hexachlorobenzene	ND	0.13		mg/L	1	8/14/2014 12:05:53 PM	14725
Hexachlorobutadiene	ND	0.50		mg/L	1	8/14/2014 12:05:53 PM	14725
Hexachloroethane	ND	3.0		mg/L	1	8/14/2014 12:05:53 PM	14725
Nitrobenzene	ND	2.0		mg/L	1	8/14/2014 12:05:53 PM	14725
Pentachlorophenol	ND	100		mg/L	1	8/14/2014 12:05:53 PM	14725
Pyridine	ND	5.0		mg/L	1	8/14/2014 12:05:53 PM	14725
2,4,5-Trichlorophenol	ND	400		mg/L	1	8/14/2014 12:05:53 PM	14725
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	8/14/2014 12:05:53 PM	14725
Cresols, Total	ND	200		mg/L	1	8/14/2014 12:05:53 PM	14725
Surr: 2-Fluorophenol	77.5	25-105		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: Phenol-d5	53.9	22.3-70.3		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: 2,4,6-Tribromophenol	88.8	30.4-134		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: Nitrobenzene-d5	103	54.8-128		%REC	1	8/14/2014 12:05:53 PM	14725

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Analytical Report

Lab Order 1408348

Date Reported: 8/15/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: B #5 WWTP Dirty Sewer Spill

Project: WWTP Baker Tank Overflow

Collection Date: 8/6/2014 4:05:00 PM

Lab ID: 1408348-007

Matrix: SLUDGE

Received Date: 8/7/2014 4:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C TCLP							Analyst: DAM
Surr: 2-Fluorobiphenyl	99.7	53.3-122		%REC	1	8/14/2014 12:05:53 PM	14725
Surr: 4-Terphenyl-d14	94.7	51.8-133		%REC	1	8/14/2014 12:05:53 PM	14725
VOLATILES BY 8260B/1311							Analyst: KJH
Benzene	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
2-Butanone	ND	200		mg/L	1	8/12/2014 3:59:54 PM	14698
Carbon Tetrachloride	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
Chlorobenzene	ND	100		mg/L	1	8/12/2014 3:59:54 PM	14698
Chloroform	ND	6.0		mg/L	1	8/12/2014 3:59:54 PM	14698
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/12/2014 3:59:54 PM	14698
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
1,1-Dichloroethene	ND	0.70		mg/L	1	8/12/2014 3:59:54 PM	14698
Hexachlorobutadiene	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/12/2014 3:59:54 PM	14698
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/12/2014 3:59:54 PM	14698
Vinyl chloride	ND	0.20		mg/L	1	8/12/2014 3:59:54 PM	14698
Surr: 1,2-Dichloroethane-d4	95.3	69.9-130		%REC	1	8/12/2014 3:59:54 PM	14698
Surr: 4-Bromofluorobenzene	92.3	71.2-123		%REC	1	8/12/2014 3:59:54 PM	14698
Surr: Dibromofluoromethane	97.9	73.9-134		%REC	1	8/12/2014 3:59:54 PM	14698
Surr: Toluene-d8	94.4	81.9-122		%REC	1	8/12/2014 3:59:54 PM	14698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 12 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report

Sample Number	140812044-001	Date/Time Received	8/12/2014 12:40 PM
Client Sample ID	1408348-003B / B #1 WWTP DIRTY SEWER SPILL	Sampling Date	8/6/2014
Matrix	Solid	Sampling Time	3:30 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.241	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	8.70	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	ND	mg/kg	36.2	8/14/2014	HSW	SW846 CH7	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report

Sample Number	140812044-002	Date/Time Received	8/12/2014 12:40 PM
Client Sample ID	1408348-004B / B #2 WWTP DIRTY SEWER SPILL	Sampling Date	8/6/2014
Matrix	Solid	Sampling Time	1:40 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.237	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	8.74	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	37.4	mg/kg	23.7	8/14/2014	HSW	SW846 CH7	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report

Sample Number	140812044-003	Date/Time Received	8/12/2014 12:40 PM
Client Sample ID	1408348-005B / B #3 WWTP DIRTY SEWER SPILL	Sampling Date	8/6/2014
Matrix	Solid	Sampling Time	3:50 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.226	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	9.18	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	36.2	mg/kg	22.6	8/14/2014	HSW	SW846 CH7	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report

Sample Number	140812044-004	Date/Time Received	8/12/2014 12:40 PM
Client Sample ID	1408348-006B / B #4 WWTP DIRTY SEWER SPILL	Sampling Date	8/6/2014
Matrix	Solid	Sampling Time	4:00 PM
Comments	Sample results reported as received.		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	0.189	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	8.64	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	30.2	mg/kg	18.9	8/14/2014	HSW	SW846 CH7	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report

Sample Number 140812044-005
Client Sample ID 1408348-007B / B #5 WWTP DIRTY SEWER SPILL
Matrix Solid
Comments Sample results reported as received.

Date/Time Received 8/12/2014 12:40 PM
Sampling Date 8/6/2014
Sampling Time 4:05 PM

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	0.214	mg/Kg	0.191	8/14/2014	CRW	SW846 CH7	
Ignitability	Negative			8/13/2014	JWC	EPA 1030	
pH	9.18	ph Units		8/13/2014	HSW	EPA 9045	
Reactive sulfide	ND	mg/kg	23.3	8/14/2014	HSW	SW846 CH7	

Authorized Signature


John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C595; MT:Cert0099; FL(NELAP): E871099

Thursday, August 14, 2014

Page 5 of 5

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140812044
Project Name: 1408348

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Reactive sulfide	0.140	mg/kg	0.2	70.0	70-130	8/14/2014	8/14/2014
Cyanide (reactive)	0.510	mg/kg	0.5	102.0	90-110	8/14/2014	8/14/2014

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
140812044-002	Reactive sulfide	37.4	171	mg/kg	200	66.8	70-130	8/14/2014	8/14/2014
140812044-005	Cyanide (reactive)	0.214	9.69	mg/kg	9.55	99.2	80-120	8/14/2014	8/14/2014

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide (reactive)	9.49	mg/kg	9.55	97.1	2.1	0-25	8/14/2014	8/14/2014

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide (reactive)	ND	mg/Kg	1	8/14/2014	8/14/2014
Reactive sulfide	ND	mg/kg	1	8/14/2014	8/14/2014

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87693; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14675		SampType: MBLK		TestCode: GRO by 8015D					
Client ID:	PBW		Batch ID: 14675		RunNo: 20517					
Prep Date:	8/8/2014		Analysis Date: 8/12/2014		SeqNo: 597191		Units: wt%			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	2.5								
Surr: BFB	950		1000		94.7	75.3	119			

Sample ID	LCS-14675			SampType:	LCS		TestCode:	GRO by 8015D			
Client ID:	LCSW			Batch ID:	14675		RunNo:	20517			
Prep Date:	8/8/2014			Analysis Date:	8/12/2014		SeqNo:	597192		Units:	wt%
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	31	2.5	25.00	0	124	78.5	121			S	
Surr: BFB	1000		1000		103	75.3	119				

Sample ID	LCSD-14675		SampType: LCSD		TestCode: GRO by 8015D					
Client ID:	LCSS02		Batch ID: 14675		RunNo: 20517					
Prep Date:	8/8/2014		Analysis Date: 8/12/2014		SeqNo: 597193		Units: wt%			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	2.5	25.00	0	122	78.5	121	1.43	8.39	S
Surr: BFB	1000		1000		102	75.3	119	0	0	

Sample ID	MB-14707		SampType: MBLK		TestCode: GRO by 8015D					
Client ID:	PBW		Batch ID: 14707		RunNo: 20517					
Prep Date:	8/11/2014		Analysis Date: 8/13/2014		SeqNo: 597222		Units: wt%			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	2.5								
Surr: BFB	940		1000		94.1	75.3	119			

Sample ID	LCS-14707		SampType: LCS		TestCode: GRO by 8015D					
Client ID:	LCSW		Batch ID: 14707		RunNo: 20517					
Prep Date:	8/11/2014		Analysis Date: 8/13/2014		SeqNo: 597223		Units: wt%			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	2.5	25.00	0	117	78.5	121			
Surr: BFB	1000		1000		102	75.3	119			

Sample ID	LCSD-14707			SampType:	LCSD			TestCode:	GRO by 8015D		
Client ID:	LCSS02			Batch ID:	14707			RunNo:	20517		
Prep Date:	8/11/2014			Analysis Date:	8/13/2014			SeqNo:	597224		Units: wt%
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	LCSD-14707	SampType:	LCSD	TestCode:	GRO by 8015D					
Client ID:	LCSS02	Batch ID:	14707	RunNo:	20517					
Prep Date:	8/11/2014	Analysis Date:	8/13/2014	SeqNo:	597224	Units:	wt%			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	2.5	25.00	0	122	78.5	121	4.09	8.39	S
Surr: BFB	1000		1000		103	75.3	119	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14669	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	14669	RunNo:	20505					
Prep Date:	8/8/2014	Analysis Date:	8/11/2014	SeqNo:	596079	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.6	80	120			

Sample ID	LCS-14669	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	14669	RunNo:	20505					
Prep Date:	8/8/2014	Analysis Date:	8/11/2014	SeqNo:	596080	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	119	65.8	139			
Surr: BFB	1000		1000		102	80	120			

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R20546	RunNo:	20546					
Prep Date:		Analysis Date:	8/13/2014	SeqNo:	597802	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.1	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R20546	RunNo:	20546					
Prep Date:		Analysis Date:	8/13/2014	SeqNo:	597803	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.5	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14675	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBW	Batch ID:	14675		RunNo:	20517				
Prep Date:	8/8/2014	Analysis Date:	8/12/2014		SeqNo:	597253		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.5								
Toluene	ND	2.5								
Ethylbenzene	ND	2.5								
Xylenes, Total	ND	5.0								
m,p-Xylene	ND	2.5								
o-Xylene	ND	2.5								
Surr: 4-Bromofluorobenzene	54		50.00		107	76.8	126			

Sample ID	LCS-14675	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID: 14675			RunNo: 20517					
Prep Date:	8/8/2014	Analysis Date: 8/13/2014			SeqNo: 597254		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	49	2.5	50.00	0	98.2	70.4	134			
Toluene	48	2.5	50.00	0	95.8	69.7	129			
Ethylbenzene	49	2.5	50.00	0	97.2	73	127			
Xylenes, Total	150	5.0	150.0	0	97.5	75.5	126			
m,p-Xylene	98	2.5	100.0	0	98.5	75.5	128			
o-Xylene	48	2.5	50.00	0	95.4	75.3	121			
Surr: 4-Bromofluorobenzene	53		50.00		106	76.8	126			

Sample ID	LCSD-14675		SampType: LCSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS02		Batch ID: 14675		RunNo: 20517					
Prep Date:	8/8/2014		Analysis Date: 8/13/2014		SeqNo: 597255		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	48	2.5	50.00	0	96.8	70.4	134	1.39	27	
Toluene	48	2.5	50.00	0	96.0	69.7	129	0.155	19	
Ethylbenzene	49	2.5	50.00	0	98.0	73	127	0.773	10	
Xylenes, Total	150	5.0	150.0	0	97.2	75.5	126	0.274	13	
m,p-Xylene	98	2.5	100.0	0	98.4	75.5	128	0	0	
o-Xylene	47	2.5	50.00	0	94.8	75.3	121	0	0	
Surr: 4-Bromofluorobenzene	54		50.00		108	76.8	126	0	0	

Sample ID	MB-14707		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBW		Batch ID: 14707		RunNo: 20517					
Prep Date:	8/11/2014		Analysis Date: 8/13/2014		SeqNo: 597257		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	2.5								

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH greater than 2.

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14707		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBW		Batch ID:	14707		RunNo:	20517			
Prep Date:	8/11/2014		Analysis Date:	8/13/2014		SeqNo:	597257		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	2.5								
Ethylbenzene	ND	2.5								
Xylenes, Total	ND	5.0								
m,p-Xylene	ND	2.5								
o-Xylene	ND	2.5								
Surr: 4-Bromofluorobenzene	53		50.00		105	76.8	126			

Sample ID	LCS-14707		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSW		Batch ID:	14707		RunNo:	20533			
Prep Date:	8/11/2014		Analysis Date:	8/12/2014		SeqNo:	597341		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	50.00	0	86.2	70.4	134			
Toluene	42	2.5	50.00	0	84.8	69.7	129			
Ethylbenzene	43	2.5	50.00	0	86.3	73	127			
Xylenes, Total	140	5.0	150.0	0	90.8	75.5	126			
m,p-Xylene	92	2.5	100.0	0	91.8	75.5	128			
o-Xylene	44	2.5	50.00	0	88.8	75.3	121			
Surr: 4-Bromofluorobenzene	48		50.00		95.3	76.8	126			

Sample ID	LCSD-14707		SampType:	LCSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS02		Batch ID:	14707		RunNo:	20533			
Prep Date:	8/11/2014		Analysis Date:	8/12/2014		SeqNo:	597342		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	40	2.5	50.00	0	80.3	70.4	134	7.08	27	
Toluene	39	2.5	50.00	0	78.9	69.7	129	7.31	19	
Ethylbenzene	40	2.5	50.00	0	80.4	73	127	7.03	10	
Xylenes, Total	130	5.0	150.0	0	85.3	75.5	126	6.26	13	
m,p-Xylene	86	2.5	100.0	0	86.3	75.5	128	0	0	
o-Xylene	42	2.5	50.00	0	83.2	75.3	121	0	0	
Surr: 4-Bromofluorobenzene	53		50.00		106	76.8	126	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14669		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	14669		RunNo:	20505			
Prep Date:	8/8/2014		Analysis Date:	8/11/2014		SeqNo:	596101		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID	LCS-14669		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	14669		RunNo:	20505			
Prep Date:	8/8/2014		Analysis Date:	8/11/2014		SeqNo:	596102		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.96	0.10	1.000	0	95.6	80	120			
Benzene	0.97	0.050	1.000	0	96.7	80	120			
Toluene	0.96	0.050	1.000	0	95.8	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R20546		RunNo:	20546			
Prep Date:			Analysis Date:	8/13/2014		SeqNo:	597832		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R20546		RunNo:	20546			
Prep Date:			Analysis Date:	8/13/2014		SeqNo:	597833		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	mb-14669		SampType: MBLK		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	PBS		Batch ID: 14669		RunNo: 20527					
Prep Date:	8/8/2014		Analysis Date: 8/12/2014		SeqNo: 596917		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
mp-Xylenes	ND	0.050								
o-Xylene	ND	0.050								
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.5	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		81.7	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.7	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID	lcs-14669		SampType: LCS		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	LCSS		Batch ID: 14669		RunNo: 20527					
Prep Date:	8/8/2014		Analysis Date: 8/12/2014		SeqNo: 596918		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.4	70	130			
Chlorobenzene	0.96	0.050	1.000	0	96.5	70	130			
1,1-Dichloroethene	0.95	0.070	1.000	0	94.8	60.5	160			
Trichloroethene (TCE)	0.96	0.050	1.000	0	96.0	58.8	139			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.0	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.8	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.9	70	130			
Surr: Toluene-d8	0.47		0.5000		93.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	lcs-14656		SampType:	LCS		TestCode:	Volatiles by 8260B/1311			
Client ID:	LCSS		Batch ID:	14656		RunNo:	20527			
Prep Date:	8/7/2014		Analysis Date:	8/12/2014		SeqNo:	596903		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		96.7	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2000		89.6	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2000		97.9	73.9	134			
Surr: Toluene-d8	0.18		0.2000		92.4	81.9	122			

Sample ID	mb-14698		SampType:	MBLK		TestCode:	Volatiles by 8260B/1311			
Client ID:	PBS		Batch ID:	14698		RunNo:	20527			
Prep Date:	8/11/2014		Analysis Date:	8/12/2014		SeqNo:	596907		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	200								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		95.4	69.9	130			
Surr: 4-Bromofluorobenzene	0.17		0.2000		86.4	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2000		97.9	73.9	134			
Surr: Toluene-d8	0.18		0.2000		90.5	81.9	122			

Sample ID	1408348-005AMS		SampType:	MS		TestCode:	Volatiles by 8260B/1311			
Client ID:	B #3 WWTP Dirty Se		Batch ID:	14698		RunNo:	20527			
Prep Date:	8/11/2014		Analysis Date:	8/12/2014		SeqNo:	596910		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.22	0.10	0.4003	0	55.8	51.1	171			
Chlorobenzene	0.20	0.10	0.4003	0	50.6	36.1	191			
1,1-Dichloroethene	0.23	0.10	0.4003	0	56.3	49.1	162			
Trichloroethene (TCE)	0.21	0.10	0.4003	0	52.3	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.18		0.2002		92.3	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2002		90.0	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2002		99.2	73.9	134			
Surr: Toluene-d8	0.19		0.2002		93.6	81.9	122			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	1408348-005AMSD	SampType:	MSD	TestCode:	Volatiles by 8260B/1311					
Client ID:	B #3 WWTP Dirty Se	Batch ID:	14698	RunNo:	20527					
Prep Date:	8/11/2014	Analysis Date:	8/12/2014	SeqNo:	596912	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.18	0.10	0.4003	0	45.2	51.1	171	21.0	20	RS
Chlorobenzene	0.17	0.10	0.4003	0	43.1	36.1	191	16.1	20	
1,1-Dichloroethene	0.19	0.10	0.4003	0	46.5	49.1	162	19.1	20	
Trichloroethene (TCE)	0.18	0.10	0.4003	0	44.5	41.2	166	16.0	20	S
Surr: 1,2-Dichloroethane-d4	0.19		0.2002		94.1	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	0.17		0.2002		86.0	71.2	123	0	0	
Surr: Dibromofluoromethane	0.20		0.2002		99.2	73.9	134	0	0	
Surr: Toluene-d8	0.19		0.2002		93.9	81.9	122	0	0	

Sample ID	lcs-14698		SampType: LCS		TestCode: Volatiles by 8260B/1311					
Client ID:	LCSS		Batch ID: 14698		RunNo: 20527					
Prep Date:	8/11/2014		Analysis Date: 8/12/2014		SeqNo: 596957		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.45	0.10	0.4000	0	112	51.1	171			
Chlorobenzene	0.42	0.10	0.4000	0	105	36.1	191			
1,1-Dichloroethene	0.46	0.10	0.4000	0	116	49.1	162			
Trichloroethene (TCE)	0.44	0.10	0.4000	0	110	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		94.7	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2000		91.6	71.2	123			
Surr: Dibromofluoromethane	0.20		0.2000		97.9	73.9	134			
Surr: Toluene-d8	0.19		0.2000		94.7	81.9	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	mb-14725		SampType:	MBLK		TestCode:	EPA Method 8270C TCLP			
Client ID:	PBS		Batch ID:	14725		RunNo:	20581			
Prep Date:	8/12/2014		Analysis Date:	8/14/2014		SeqNo:	598704		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.14		0.2000		69.7	25	105			
Surr: Phenol-d5	0.11		0.2000		53.4	22.3	70.3			
Surr: 2,4,6-Tribromophenol	0.20		0.2000		98.4	30.4	134			
Surr: Nitrobenzene-d5	0.10		0.1000		99.6	54.8	128			
Surr: 2-Fluorobiphenyl	0.096		0.1000		96.1	53.3	122			
Surr: 4-Terphenyl-d14	0.087		0.1000		87.3	51.8	133			

Sample ID	lcs-14725		SampType:	LCS		TestCode:	EPA Method 8270C TCLP			
Client ID:	LCSS		Batch ID:	14725		RunNo:	20581			
Prep Date:	8/12/2014		Analysis Date:	8/14/2014		SeqNo:	598705		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.10	0.010	0.1000	0	104	52.2	95.7			S
3+4-Methylphenol	0.25	0.010	0.2000	0	126	52.4	142			
2,4-Dinitrotoluene	0.097	0.010	0.1000	0	97.1	43.4	110			
Hexachlorobenzene	0.083	0.010	0.1000	0	83.1	43.6	88.4			
Hexachlorobutadiene	0.067	0.010	0.1000	0	67.4	38.6	88.4			
Hexachloroethane	0.084	0.010	0.1000	0	84.0	45.7	83.6			S
Nitrobenzene	0.11	0.010	0.1000	0	111	51.9	112			
Pentachlorophenol	0.087	0.010	0.1000	0	87.4	15.2	81.5			S
Pyridine	0.015	0.010	0.1000	0	14.8	11.2	95.1			
2,4,5-Trichlorophenol	0.088	0.010	0.1000	0	88.4	46.9	110			
2,4,6-Trichlorophenol	0.089	0.010	0.1000	0	88.6	36.1	111			
Cresols, Total	0.36	0.010	0.3000	0	119	30	136			
Surr: 2-Fluorophenol	0.17		0.2000		84.8	25	105			
Surr: Phenol-d5	0.12		0.2000		61.9	22.3	70.3			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	ics-14725	SampType: LCS			TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS	Batch ID: 14725			RunNo: 20581					
Prep Date:	8/12/2014	Analysis Date: 8/14/2014			SeqNo: 598705		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.23		0.2000		116	30.4	134			
Surr: Nitrobenzene-d5	0.11		0.1000		111	54.8	128			
Surr: 2-Fluorobiphenyl	0.11		0.1000		111	53.3	122			
Surr: 4-Terphenyl-d14	0.12		0.1000		116	51.8	133			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14746	SampType:	MBLK	TestCode:	MERCURY, TCLP					
Client ID:	PBW	Batch ID:	14746	RunNo:	20553					
Prep Date:	8/13/2014	Analysis Date:	8/13/2014	SeqNo:	597726	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID	LCS-14746	SampType:	LCS	TestCode:	MERCURY, TCLP					
Client ID:	LCSW	Batch ID:	14746	RunNo:	20553					
Prep Date:	8/13/2014	Analysis Date:	8/13/2014	SeqNo:	597727	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	101	80	120			

Sample ID	1408348-003AMS	SampType:	MS	TestCode:	MERCURY, TCLP					
Client ID:	B #1 WWTP Dirty Se	Batch ID:	14746	RunNo:	20553					
Prep Date:	8/13/2014	Analysis Date:	8/13/2014	SeqNo:	597729	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	97.7	75	125			

Sample ID	1408348-003AMSD	SampType:	MSD	TestCode:	MERCURY, TCLP					
Client ID:	B #1 WWTP Dirty Se	Batch ID:	14746	RunNo:	20553					
Prep Date:	8/13/2014	Analysis Date:	8/13/2014	SeqNo:	597730	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	101	75	125	0	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID	MB-14750	SampType:	MBLK	TestCode:	EPA Method 6010B: TCLP Metals
Client ID:	PBW	Batch ID:	14750	RunNo:	20575
Prep Date:	8/13/2014	Analysis Date:	8/14/2014	SeqNo:	598440
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-14750	SampType:	LCS	TestCode:	EPA Method 6010B: TCLP Metals
Client ID:	LCSW	Batch ID:	14750	RunNo:	20575
Prep Date:	8/13/2014	Analysis Date:	8/14/2014	SeqNo:	598441
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	108	80	120			
Barium	ND	100	0.5000	0	94.3	80	120			
Cadmium	ND	1.0	0.5000	0	101	80	120			
Chromium	ND	5.0	0.5000	0	97.3	80	120			
Lead	ND	5.0	0.5000	0	94.1	80	120			
Selenium	ND	1.0	0.5000	0	103	80	120			
Silver	ND	5.0	0.1000	0	90.8	80	120			

Sample ID	1408348-006AMS	SampType:	MS	TestCode:	EPA Method 6010B: TCLP Metals
Client ID:	B #4 WWTP Dirty Se	Batch ID:	14750	RunNo:	20575
Prep Date:	8/13/2014	Analysis Date:	8/14/2014	SeqNo:	598446
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	104	75	125			
Barium	ND	100	0.5000	1.022	93.1	75	125			
Cadmium	ND	1.0	0.5000	0	96.4	75	125			
Chromium	ND	5.0	0.5000	0	89.6	75	125			
Lead	ND	5.0	0.5000	0.004500	85.5	75	125			
Selenium	ND	1.0	0.5000	0	90.0	75	125			
Silver	ND	5.0	0.1000	0	87.2	75	125			

Sample ID	1408348-006AMSD	SampType:	MSD	TestCode:	EPA Method 6010B: TCLP Metals
Client ID:	B #4 WWTP Dirty Se	Batch ID:	14750	RunNo:	20575
Prep Date:	8/13/2014	Analysis Date:	8/14/2014	SeqNo:	598447
				Units:	mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	99.6	75	125	0	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408348

15-Aug-14

Client: Western Refining Southwest, Gallup

Project: WWTP Baker Tank Overflow

Sample ID 1408348-006AMSD		SampType: MSD		TestCode: EPA Method 6010B: TCLP Metals						
Client ID: B #4 WWTP Dirty Se		Batch ID: 14750		RunNo: 20575						
Prep Date: 8/13/2014		Analysis Date: 8/14/2014		SeqNo: 598447		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	1.022	93.1	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	94.8	75	125	0	20	
Chromium	ND	5.0	0.5000	0	87.6	75	125	0	20	
Lead	ND	5.0	0.5000	0.004500	83.7	75	125	0	20	
Selenium	ND	1.0	0.5000	0	87.5	75	125	0	20	
Silver	ND	5.0	0.1000	0	87.1	75	125	0	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1408348

RcptNo: 1

Received by/date:

A.T.

08/07/14

Logged By: Ashley Gallegos

8/7/2014 4:20:00 PM

Ag

Completed By: Ashley Gallegos

8/7/2014 5:08:42 PM

Ag

Reviewed By:

IO

08/08/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒ # of preserved bottles checked for pH: (2 or 12 unless noted)
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ Adjusted?
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No.	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Tuesday, April 01, 2014 11:39 AM
To: Powell, Brandon, EMNRD; Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Johnson, Cheryl
Subject: C-141
Attachments: 201404011116.pdf

To all,

Attached is the initial C-141 for the release reported to you on March 19, 2014. I am also answering Kristen's and Carl's questions from your March 20 emails in a separate letter to be sent this week.

Thanks
Ed

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Western Refining Southwest, Incorporated	Contact	Ed Riege
Address	92 Giant Crossing Road Gallup NM 87301	Telephone No.	505-722-0217
Facility Name	Western Refining Southwest Gallup Refinery	Facility Type	Petroleum Refinery
Surface Owner	Mineral Owner	API No.	

LOCATION OF RELEASE

Unit Letter	Section 23 and 33	Township 15N	Range 15W	Feet from the	North/South Line	Feet from the	East/West Line	County	Mckinley
-------------	-------------------------	-----------------	--------------	---------------	------------------	---------------	----------------	--------	----------

Latitude 35° 29' 22'' Longitude 108° 25' 24''

NATURE OF RELEASE

Type of Release	Pond Water	Volume of Release	17.4 bbls	Volume Recovered	None
Source of Release	Evaporation Pond #7	Date and Hour of Occurrence	03-19-2014 1500 hr	Date and Hour of Discovery	03-19-2014 1515 hr
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Message Brandon Powell phone / email Carl Chavez phone / email Kristen Van Horn phone / email		
By Whom?	Ed Riege	Date and Hour	03-19-2014 1805 hr 03-19-2014 1810 hr 03-19-2014 1815 hr		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					

Describe Cause of Problem and Remedial Action Taken.*

A Western employee observed a breach in the pond 7 dike. Western was in the process of improving the pond dikes and earth moving equipment, which was operating nearby, immediately responded to make repairs and stopped the release at 1630Hr.

Western has collected a sample of the water, which flowed through the breach, and soil samples from the impacted area. These samples are being analyzed for volatile organic compounds (VOCs), SVOCs, Diesel Range Organics (extended), New Mexico Water Quality Control Criteria metals, and major cation/anions. The results of the above listed analyses will help to direct any subsequent corrective action steps. The NM State land map indicates the owner of the property west of Pond 7 belongs to the state of New Mexico.

To address any concerns about seepage through the dikes or failure of the perimeter dikes, Western contracted Franklin Earthmoving Inc. to improve approximately 80% of the existing pond dikes. This work began in late January 2014 and is expected to continue through mid to late April. This work consists of widening the dikes and improving the outside slope of the berms, and repairing water and wind erosion to the top of the dikes (see enclosed pictures). The area of the breach at pond 7 was the original dike that had not yet been improved by Franklin as they were working approximately 150 yards northeast of the breach. The area impacted by the breach will be rebuilt to prevent any future breaches/seeps.

In addition to the physical improvement of the pond perimeter dikes, Western is pursuing the installation of a more aggressive evaporation system and water conservation measures. These measures should control free board levels and help prevent future seepage through the dikes and breaching of the dikes. Shallow groundwater is routinely monitored in the area and there is no indication of impacts to groundwater from the evaporation ponds.

Describe Area Affected and Cleanup Action Taken.*

It is estimated that 17.4 bbls of wastewater left the pond with possibly half crossing the fence line west of the dike. The small volume of water was absorbed by the dry soil and the release did not reach a watercourse or waters of the U.S. The results of the above listed analyses will help to direct any subsequent corrective action steps

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>[Signature]</i>		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: <i>Ed Riege</i>			
Title: <i>Environmental Manager</i>		Approval Date:	Expiration Date:
E-mail Address: <i>ed.riege@wnr.com</i>		Conditions of Approval:	Attached <input type="checkbox"/>
Date: <i>4-1-14</i> Phone: <i>505-722-0217</i>			

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: VanHorn, Kristen, NMENV
Sent: Thursday, March 20, 2014 12:01 PM
To: Riege, Ed; Larsen, Thurman; Johnson, Cheryl (Cheryl.Johnson@wnr.com)
Cc: Cobrain, Dave, NMENV; Dhawan, Neelam, NMENV; Chavez, Carl J, EMNRD
Subject: Breach at EP-7

Ed,

I received your voicemail and email regarding the breach at Pond 7.

To summarize, at around 3pm on March 19, 2014 an employee observed a breach at Pond 7. Western had some earth moving equipment in the area and immediately responded and were able to stop the release by 430pm. An estimated that 17.4 bbls of wastewater left the pond with half crossing the fence line west of the dike which was absorbed by dry soil. The release did not reach a watercourse or a water of the US. Western will monitor the repaired area and [collect](#) soil samples for laboratory analysis from both on- and off-site locations within the affected area. Western will also prepare an initial C-141 form.

Pond 7 is part of the Solid Waste Management Unit (SWMU) 1, the Aeration Basin. This release is a release of solid waste from SWMU 1. Because the release left the property boundary, Western must follow Permit Section IV.B.1 (Corrective Action Beyond the Facility Boundary), which reads in part "The Permittee shall notify the NMED, orally and in writing in accordance with Permit Section II.C.2.c, upon discovery that a release of hazardous waste or hazardous constituents has migrated beyond the facility boundary..." The phone call and C-141 cover the requirement in Permit Section II.C.2.c. Pond 7 has arsenic above screening levels as well as manganese, selenium, phenol, and bis(2-ethyl hexyl)phthalate based on the 2012 evaporation pond sampling results. Western must follow corrective action procedures as outlined in the permit.

In May of 2013 the Surface Water Quality Bureau noted that there was some seepage from Pond 7 (and Pond 8) and noted that the way the seepage was occurring was a concern because the water is not captured prior to Outfall 001 and could essentially become an uncontrolled point of discharge of process water. In your report, clarify whether or not anything was done since May to address the seepage issue.

Western submitted a C-141 Report at the Oil Conservation Division's request in July 2013 and noted that "in response to the potential release of chemical constituents from some of the evaporation ponds during a time period when high pond levels caused seepage along the pond perimeter dikes. As noted in the C-141 Form, soil samples collected from around the perimeter of the ponds were to be analyzed for semi-volatile organics and chloride. As shown in the attached laboratory report, all analyses for semi-volatile organics were non-detect. The analyses for chloride indicate chloride concentrations in excess of the concentrations detected in the three background soil samples. The attached draft map shows the chloride concentrations around the ponds and in the three background samples." Samples were not collected for metals analysis, ensure that metals analysis are included in the breach soil samples. Western must also test for DRO-extended. Also discuss what is being done to ensure that pond levels are maintained at manageable levels.

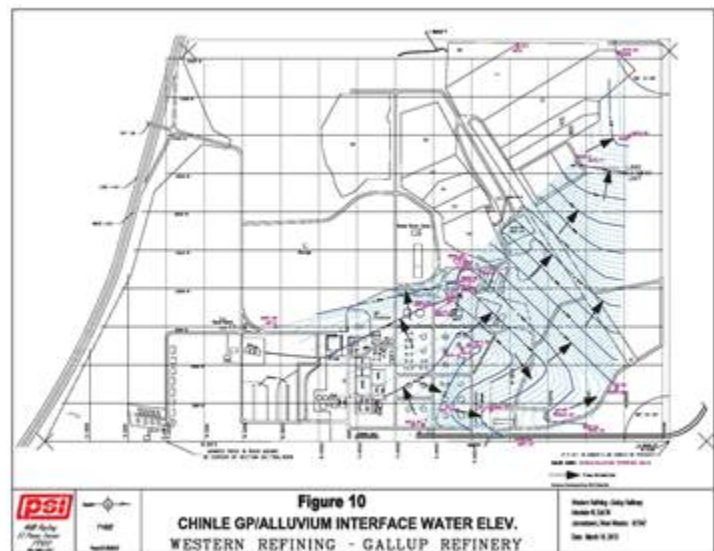
In your letter report, please include photos of the area, repair of the dike, and cleanup activities.

If you have any questions, please contact me.

Kristen Van Horn
NMED Hazardous Waste Bureau

2905 Rodeo Park Drive East
Building 1
Santa Fe, NM 87505
Phone: 505-476-6046
Email: Kristen.VanHorn@state.nm.us

Could you please update OCD on the environmental investigation (see figure below) and is Western considering lining the ponds to prevent continued breaches of the pond network?



Thank you.

New Mexico Energy, Minerals & Natural Resources Department

1220 South St. Francis Drive, Santa Fe, New Mexico 87505

E-mail: CarlJ.Chavez@State.NM.US

1

“Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?” To see how, please go to: “Pollution Prevention & Waste Minimization” at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

From: Riege, Ed [<mailto:Ed.Riege@wnr.com>]

Sent: Wednesday, March 19, 2014 6:38 PM

To: Powell, Brandon, EMNRD

Cc: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; Larsen, Thurman; Johnson, Cheryl

Subject: Minor Release

Brandon,

As per our phone conversation this evening here is a short summary of the minor release. At 1515 hr on March 19, one of our employees making his rounds at the ponds observed a breach in pond 7 dike. We estimate the leak started around 1500 hr. Western had some earth moving equipment (Franklin Earthmoving) in the pond area and they immediately responded with their heavy equipment and were able to make repairs and stopped the release at 1630 hr. It is estimated that 17.4 bbls of wastewater left the pond with half crossing the fence line west of the dike which was absorbed by the dry soil. The release did not reach a watercourse or a water of the US. Western will monitor the repaired area and take soil samples from the spill site. Western will also prepare an initial C-141 form and send to you.

Thanks,

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
92 Giant Crossing Road
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

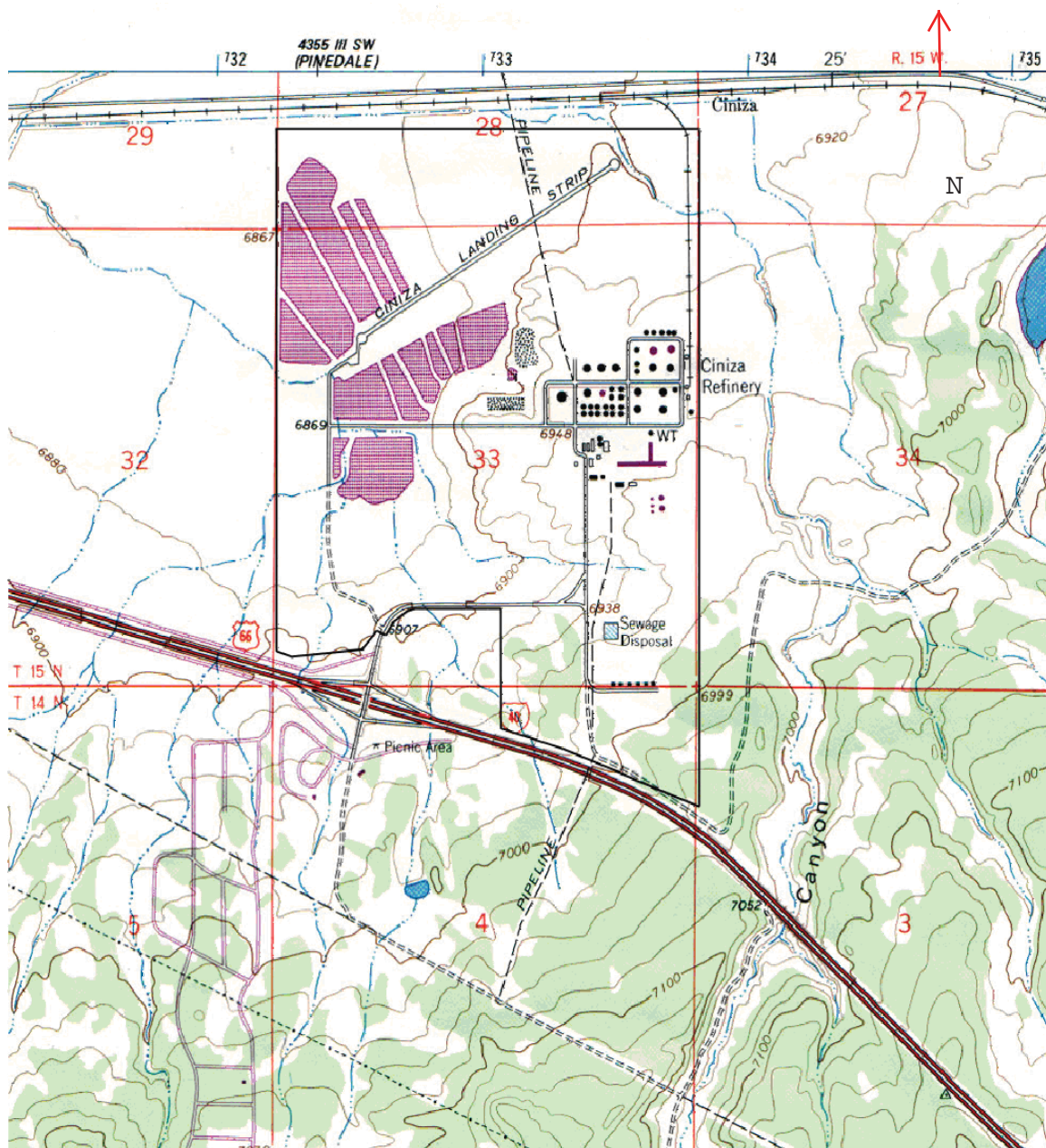
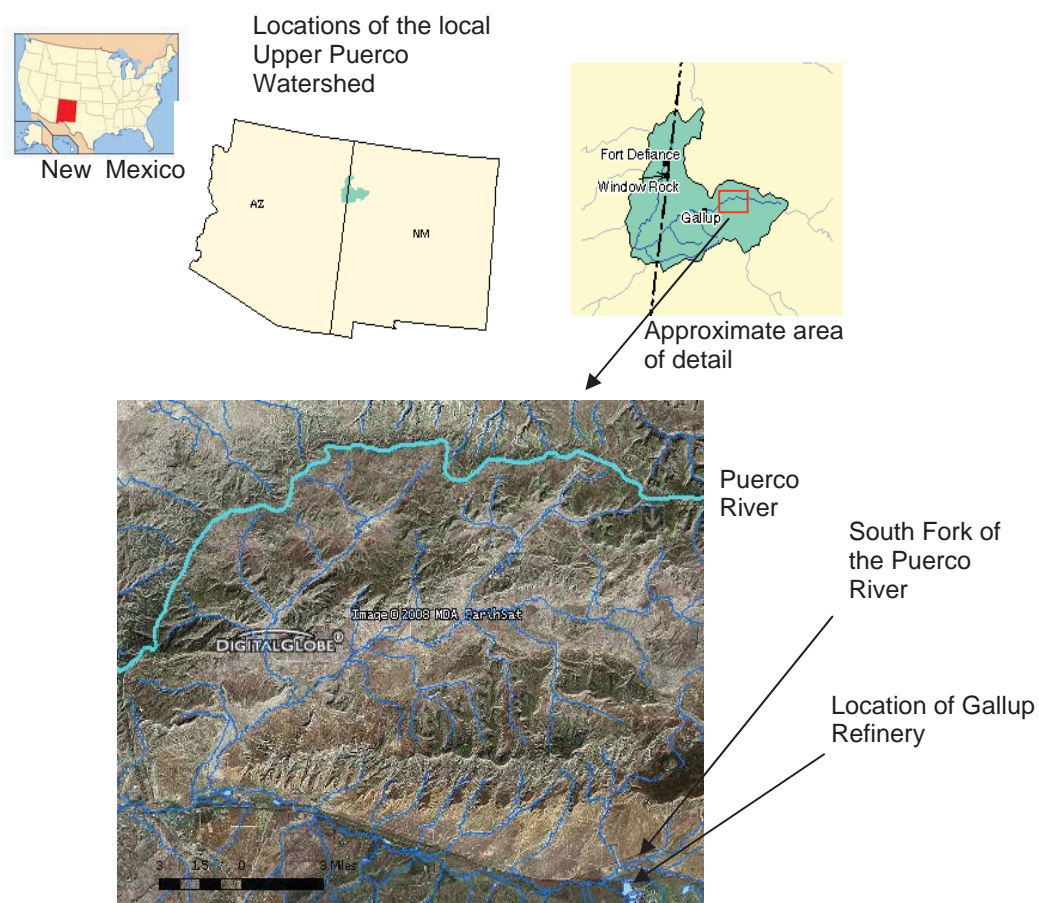


Figure 2: Topographic Map of the Gallup Refinery Site - USGS Topographical Map - Gallup Quadrangle (Revised 1980)



Figure 3: Aerial photograph of the Gallup Refinery

Figure 4: Regional scale: Flow lines and major surface water bodies (from: EPA Enviromapper - <http://map24.epa.gov/EMR/?ZoomToWatershed=15020006>) North is towards the top of the page.



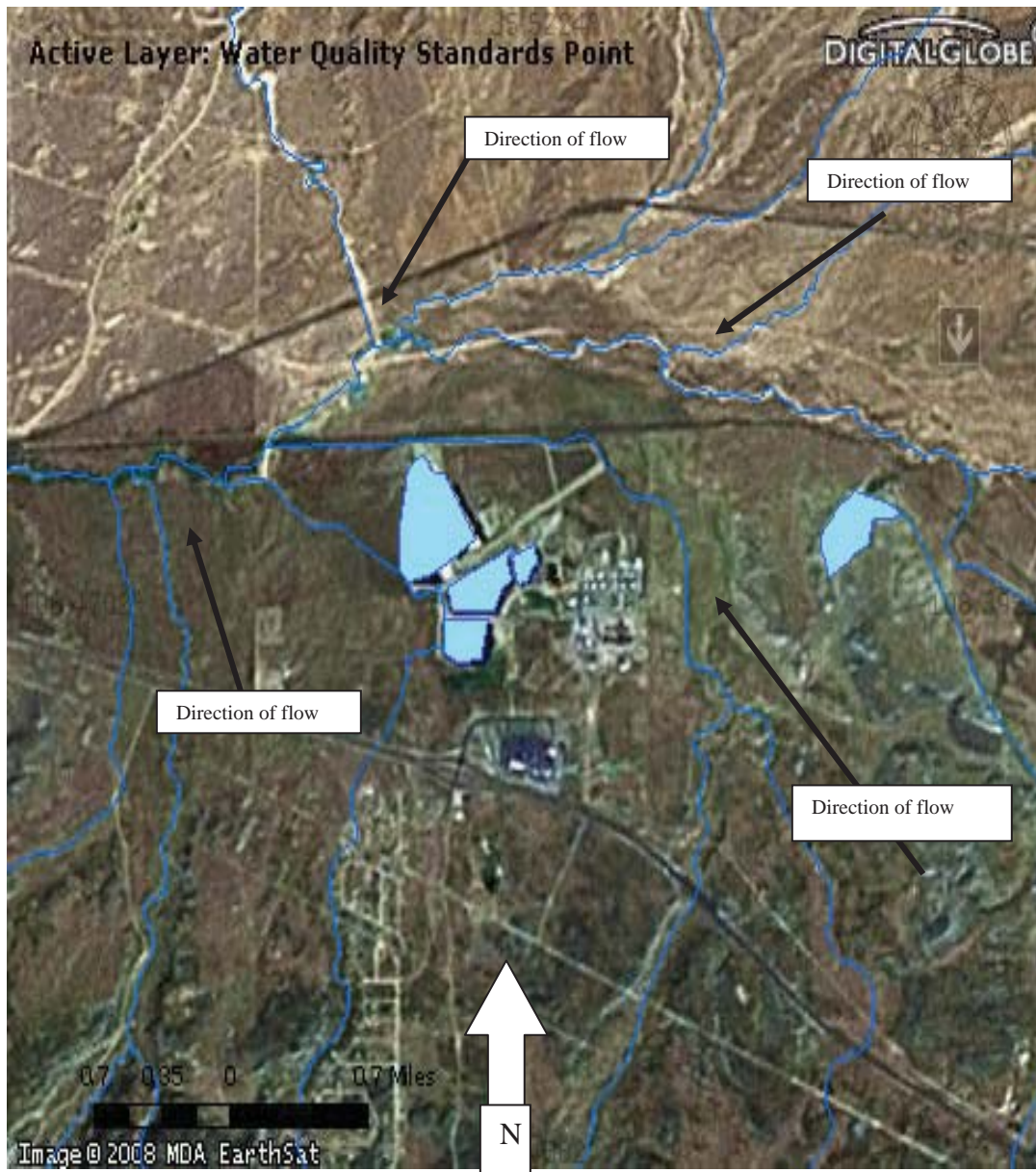


Figure 5: Localized scale: Flow lines and major surface water bodies (from: EPA EnviroMapper - <http://map24.epa.gov/EMR/?ZoomToWatershed=15020006>) North is towards the top of the page. The pond to the east is Jon Myers' Livestock Pond.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, February 07, 2014 4:25 PM
To: 'Riege, Ed'; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch
Subject: RE: Evaporation Pond Chlorides
Attachments: C-141 EP Seeps 2-7-2014.pdf

Ed:

The answer to your question in Western's October 14, 2013 letter (see attachment) is "Yes".

Please proceed. Sorry for the late response.

Thank you.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division, Environmental Bureau

1220 South St. Francis Drive, Santa Fe, New Mexico 87505

O: (505) 476-3490

E-mail: CarlJ.Chavez@State.NM.US

Web: <http://www.emnrd.state.nm.us/ocd/>

“Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?” To see how, please go to: “Pollution Prevention & Waste Minimization” at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

-----Original Message-----

From: Riege, Ed [<mailto:Ed.Riege@wnr.com>]

Sent: Monday, October 14, 2013 8:18 AM

To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD

Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch

Subject: Evaporation Pond Chlorides

Carl,

Please see attached letter regarding chlorides from evaporation pond seepage. Signed hard copy is in the mail.

Thanks,

Ed

Ed Riege MPH

Environmental Manager

Western Refining

Gallup Refinery

Route 3 Box 7

Gallup, NM 87301

(505) 722-0217

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Monday, October 14, 2013 8:18 AM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch
Subject: Evaporation Pond Chlorides
Attachments: perimeter soil samples - Rpt_1307A80_Final_v1.pdf; DRAFT - Chloride Concentration Map.pdf; 201310140811.pdf

Carl,
Please see attached letter regarding chlorides from evaporation pond seepage. Signed hard copy is in the mail.
Thanks,
Ed

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

Certified Mail #7011 2970 0003 9281 8404

October 14, 2013

Mr. Carl Chavez
Oil Conservation Division
Environmental Bureau
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Re: Remediation Standards for Chlorides From Pond Dike Seepage

Dear Mr. Chavez:

Western submitted a C-141 Form on July 18, 2013 in response to the potential release of chemical constituents from some of the evaporation ponds during a time period when high pond levels caused seepage along the pond perimeter dikes. As noted in the C-141 Form, soil samples collected from around the perimeter of the ponds were to be analyzed for semi-volatile organics and chloride. As shown in the attached laboratory report, all analyses for semi-volatile organics were non-detect. The analyses for chloride indicate chloride concentrations in excess of the concentrations detected in the three background soil samples. The attached draft map shows the chloride concentrations around the ponds and in the three background samples.

We reviewed the OCD rules (Parts 1 through 39 of Title 19, Chapter 15) to identify appropriate remediation standards for chlorides in soils and noted that the new "pit" rules in 19.15.17.13 do provide specific remediation standards for chloride. The values in Table 1, which apply to situations where the pit contents are removed, appear to be appropriate remediation standards for the chloride we have identified in soils near some of the evaporation ponds. Before proceeding further with any additional sampling and/or remediation, I would like to get confirmation that the remediation standards for chloride in Table 1 of 19.15.17.13 are acceptable standards to guide our actions.

Please contact me at (505) 722-0217 if you have any or questions regarding this submittal.

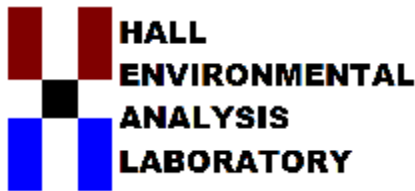
Sincerely,



Ed Riege
Environmental Manager

C: Glen VonGonten - email
Kristen Van Horn- email





Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 06, 2013

Cheryl Johnson

Western Refining Southwest, Gallup
Rt. 3 Box 7

Gallup, NM 87301

TEL: (505) 722-0231

FAX (505) 722-0210

RE: MSGP INSPECTION REPORT

OrderNo.: 1307A80

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 7/24/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:02:00 AM

Lab ID: 1307A80-001

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	4300	300		mg/Kg	200	7/30/2013 8:03:56 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:02:00 AM

Lab ID: 1307A80-001

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Surr: 2,4,6-Tribromophenol	41.0	36.5-113		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 2-Fluorobiphenyl	94.2	43.3-111		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 2-Fluorophenol	88.2	32.2-118		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 4-Terphenyl-d14	78.0	29.7-111		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: Nitrobenzene-d5	91.6	36.6-132		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: Phenol-d5	91.4	28.5-128		%REC	1	7/30/2013 9:37:41 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:17:00 AM

Lab ID: 1307A80-002

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	14000	750		mg/Kg	500	7/30/2013 8:16:20 PM	8576
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Aniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Carbazole	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Chrysene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:17:00 AM

Lab ID: 1307A80-002

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Fluorene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Isophorone	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Phenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pyridine	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Surr: 2,4,6-Tribromophenol	43.9	36.5-113		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 2-Fluorobiphenyl	78.1	43.3-111		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 2-Fluorophenol	71.8	32.2-118		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 4-Terphenyl-d14	71.3	29.7-111		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: Nitrobenzene-d5	69.0	36.6-132		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: Phenol-d5	69.0	28.5-128		%REC	1	7/30/2013 12:46:46 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:30:00 AM

Lab ID: 1307A80-003

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	8800	750		mg/Kg	500	7/30/2013 8:28:45 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:30:00 AM

Lab ID: 1307A80-003

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Isophorone	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pyridine	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Surr: 2,4,6-Tribromophenol	42.3	36.5-113		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 2-Fluorobiphenyl	59.2	43.3-111		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 2-Fluorophenol	61.5	32.2-118		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 4-Terphenyl-d14	71.1	29.7-111		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: Nitrobenzene-d5	72.6	36.6-132		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: Phenol-d5	58.5	28.5-128		%REC	1	7/29/2013 8:27:52 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:45:00 AM

Lab ID: 1307A80-004

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	13000	750		mg/Kg	500	7/30/2013 8:41:09 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Acenaphthylene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Aniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Azobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benz(a)anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(a)pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(b)fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(g,h,i)perylene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(k)fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzoic acid	ND	0.97		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzyl alcohol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroethoxy)methane	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroethyl)ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Bromophenyl phenyl ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Butyl benzyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Carbazole	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Chloronaphthalene	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Chlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chlorophenyl phenyl ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Chrysene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dibenz(a,h)anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dibenzofuran	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,2-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,3-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,4-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3,3'-Dichlorobenzidine	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Diethyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dimethyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dimethylphenol	ND	0.29		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:45:00 AM

Lab ID: 1307A80-004

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Fluorene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorobutadiene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorocyclopentadiene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachloroethane	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Isophorone	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1-Methylnaphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Methylnaphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3+4-Methylphenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
N-Nitrosodi-n-propylamine	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
N-Nitrosodiphenylamine	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Naphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Nitroaniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3-Nitroaniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Nitrophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Nitrophenol	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Phenanthrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Phenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pyridine	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,2,4-Trichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4,5-Trichlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4,6-Trichlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Surr: 2,4,6-Tribromophenol	43.8	36.5-113		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 2-Fluorobiphenyl	64.1	43.3-111		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 2-Fluorophenol	67.2	32.2-118		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 4-Terphenyl-d14	66.9	29.7-111		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: Nitrobenzene-d5	68.8	36.6-132		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: Phenol-d5	75.9	28.5-128		%REC	1	7/30/2013 1:15:38 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:00:00 AM

Lab ID: 1307A80-005

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/30/2013 8:53:33 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:00:00 AM

Lab ID: 1307A80-005

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Surr: 2,4,6-Tribromophenol	38.9	36.5-113		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 2-Fluorobiphenyl	68.5	43.3-111		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 2-Fluorophenol	73.9	32.2-118		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 4-Terphenyl-d14	59.4	29.7-111		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: Nitrobenzene-d5	67.2	36.6-132		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: Phenol-d5	62.9	28.5-128		%REC	1	7/29/2013 8:56:40 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:15:00 AM

Lab ID: 1307A80-006

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	12000	300		mg/Kg	200	7/30/2013 9:05:58 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Acenaphthylene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Aniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Azobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzoic acid	ND	2.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzyl alcohol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Carbazole	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chloroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Chlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Chrysene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dibenzofuran	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Diethyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**

Date Reported: **8/6/2013**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:15:00 AM

Lab ID: 1307A80-006

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Fluorene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachloroethane	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Isophorone	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Naphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Nitroaniline	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Nitrobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Nitrophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Nitrophenol	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pentachlorophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Phenanthrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Phenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pyridine	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Surr: 2,4,6-Tribromophenol	23.7	36.5-113	S	%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 2-Fluorobiphenyl	53.8	43.3-111		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 2-Fluorophenol	44.7	32.2-118		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 4-Terphenyl-d14	48.0	29.7-111		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: Nitrobenzene-d5	45.9	36.6-132		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: Phenol-d5	47.9	28.5-128		%REC	1	7/30/2013 12:18:12 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:30:00 AM

Lab ID: 1307A80-007

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	21000	750		mg/Kg	500	7/30/2013 2:53:42 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 8-3**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 10:30:00 AM**Lab ID:** 1307A80-007**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Surr: 2,4,6-Tribromophenol	48.6	36.5-113		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 2-Fluorobiphenyl	77.4	43.3-111		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 2-Fluorophenol	83.7	32.2-118		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 4-Terphenyl-d14	67.2	29.7-111		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: Nitrobenzene-d5	82.7	36.6-132		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: Phenol-d5	82.1	28.5-128		%REC	1	7/29/2013 9:25:29 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-4

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:45:00 AM

Lab ID: 1307A80-008

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	16000	750		mg/Kg	500	7/30/2013 3:18:31 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzoic acid	ND	5.1		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-4

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:45:00 AM

Lab ID: 1307A80-008

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Surr: 2,4,6-Tribromophenol	44.3	36.5-113		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 2-Fluorobiphenyl	87.4	43.3-111		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 2-Fluorophenol	101	32.2-118		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 4-Terphenyl-d14	83.4	29.7-111		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: Nitrobenzene-d5	93.7	36.6-132		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: Phenol-d5	97.6	28.5-128		%REC	1	7/30/2013 12:35:14 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-5

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:00:00 AM

Lab ID: 1307A80-009

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 3:43:20 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-5

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:00:00 AM

Lab ID: 1307A80-009

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Surr: 2,4,6-Tribromophenol	41.4	36.5-113		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 2-Fluorobiphenyl	77.3	43.3-111		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 2-Fluorophenol	77.4	32.2-118		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 4-Terphenyl-d14	69.1	29.7-111		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: Nitrobenzene-d5	73.9	36.6-132		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: Phenol-d5	78.8	28.5-128		%REC	1	7/29/2013 9:54:16 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:15:00 AM

Lab ID: 1307A80-010

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	3300	750		mg/Kg	500	7/30/2013 4:08:10 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:15:00 AM

Lab ID: 1307A80-010

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Surr: 2,4,6-Tribromophenol	39.0	36.5-113		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 2-Fluorobiphenyl	82.9	43.3-111		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 2-Fluorophenol	87.2	32.2-118		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 4-Terphenyl-d14	72.4	29.7-111		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: Nitrobenzene-d5	67.0	36.6-132		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: Phenol-d5	83.2	28.5-128		%REC	1	7/30/2013 1:04:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:30:00 AM

Lab ID: 1307A80-011

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 4:33:00 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 7-1**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 11:30:00 AM**Lab ID:** 1307A80-011**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Isophorone	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pyridine	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Surr: 2,4,6-Tribromophenol	20.9	36.5-113	S	%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 2-Fluorobiphenyl	43.1	43.3-111	S	%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 2-Fluorophenol	44.1	32.2-118		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 4-Terphenyl-d14	44.1	29.7-111		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: Nitrobenzene-d5	41.8	36.6-132		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: Phenol-d5	41.3	28.5-128		%REC	1	7/29/2013 10:23:04 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 11-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:45:00 AM

Lab ID: 1307A80-012

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/31/2013 4:14:09 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**

Date Reported: **8/6/2013**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 11-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:45:00 AM

Lab ID: 1307A80-012

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Surr: 2,4,6-Tribromophenol	48.2	36.5-113		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 2-Fluorobiphenyl	79.0	43.3-111		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 2-Fluorophenol	76.4	32.2-118		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 4-Terphenyl-d14	66.7	29.7-111		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: Nitrobenzene-d5	70.5	36.6-132		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: Phenol-d5	69.8	28.5-128		%REC	1	7/29/2013 10:51:50 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:00:00 PM

Lab ID: 1307A80-013

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/30/2013 5:47:25 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Acenaphthylene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Aniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Azobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzoic acid	ND	10		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzyl alcohol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Carbazole	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chloroaniline	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Chlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Chrysene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dibenzofuran	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Diethyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:00:00 PM

Lab ID: 1307A80-013

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Fluorene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachloroethane	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Isophorone	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Naphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Nitroaniline	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Nitrobenzene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Nitrophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Nitrophenol	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pentachlorophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Phenanthrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Phenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pyridine	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Surr: 2,4,6-Tribromophenol	33.7	36.5-113	S	%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 2-Fluorobiphenyl	77.8	43.3-111		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 2-Fluorophenol	65.2	32.2-118		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 4-Terphenyl-d14	67.1	29.7-111		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: Nitrobenzene-d5	71.1	36.6-132		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: Phenol-d5	76.0	28.5-128		%REC	1	7/30/2013 1:33:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:40:00 PM

Lab ID: 1307A80-014

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	1100	30		mg/Kg	20	7/30/2013 5:59:49 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:40:00 PM

Lab ID: 1307A80-014

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Surr: 2,4,6-Tribromophenol	45.5	36.5-113		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 2-Fluorobiphenyl	87.1	43.3-111		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 2-Fluorophenol	65.6	32.2-118		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 4-Terphenyl-d14	91.9	29.7-111		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: Nitrobenzene-d5	74.0	36.6-132		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: Phenol-d5	73.3	28.5-128		%REC	1	7/30/2013 2:02:27 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:50:00 PM

Lab ID: 1307A80-015

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	1500	750		mg/Kg	500	7/30/2013 6:37:03 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:50:00 PM

Lab ID: 1307A80-015

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Surr: 2,4,6-Tribromophenol	52.4	36.5-113		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 2-Fluorobiphenyl	93.3	43.3-111		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 2-Fluorophenol	72.3	32.2-118		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 4-Terphenyl-d14	85.0	29.7-111		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: Nitrobenzene-d5	80.3	36.6-132		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: Phenol-d5	71.5	28.5-128		%REC	1	7/29/2013 11:20:36 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 1:00:00 PM

Lab ID: 1307A80-016

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	980	30		mg/Kg	20	7/30/2013 6:49:28 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 1:00:00 PM

Lab ID: 1307A80-016

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Surr: 2,4,6-Tribromophenol	46.4	36.5-113		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 2-Fluorobiphenyl	81.7	43.3-111		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 2-Fluorophenol	69.3	32.2-118		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 4-Terphenyl-d14	76.8	29.7-111		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: Nitrobenzene-d5	88.5	36.6-132		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: Phenol-d5	74.9	28.5-128		%REC	1	7/29/2013 11:49:25 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	MB-8576		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	8576		RunNo:	12237				
Prep Date:	7/26/2013		Analysis Date:	7/26/2013		SeqNo:	348052		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-8576		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 8576		RunNo: 12237					
Prep Date:	7/26/2013		Analysis Date: 7/26/2013		SeqNo: 348053		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

Sample ID	MB-8634		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	8634		RunNo:	12307				
Prep Date:	7/30/2013		Analysis Date:	7/30/2013		SeqNo:	350015		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-8634		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 8634		RunNo: 12307					
Prep Date:	7/30/2013		Analysis Date: 7/30/2013		SeqNo: 350016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	mb-8568	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	8568	RunNo:	12261					
Prep Date:	7/25/2013	Analysis Date:	7/29/2013	SeqNo:	348582	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	1.0								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	mb-8568		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 8568		RunNo: 12261					
Prep Date:	7/25/2013		Analysis Date: 7/29/2013		SeqNo: 348582		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	0.96		3.330		28.9	36.5	113			S
Surr: 2-Fluorobiphenyl	1.2		1.670		74.7	43.3	111			
Surr: 2-Fluorophenol	2.0		3.330		60.0	32.2	118			
Surr: 4-Terphenyl-d14	1.1		1.670		64.7	29.7	111			
Surr: Nitrobenzene-d5	1.3		1.670		80.6	36.6	132			
Surr: Phenol-d5	2.4		3.330		71.4	28.5	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	1307a80-001ams	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	POND 6-1	Batch ID:	8568	RunNo:	12294					
Prep Date:	7/25/2013	Analysis Date:	7/30/2013	SeqNo:	349614	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	1.0	1.686	0	70.9	25.6	142			
4-Chloro-3-methylphenol	ND	2.5	3.363	0	51.8	63.7	100			S
2-Chlorophenol	1.7	1.0	3.363	0	51.2	22.2	126			
1,4-Dichlorobenzene	1.1	1.0	1.686	0	63.4	12.4	115			
2,4-Dinitrotoluene	ND	2.5	1.686	0	33.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	1.0	1.686	0	63.9	13.9	136			
4-Nitrophenol	ND	1.3	3.363	0	30.5	36.7	130			S
Pentachlorophenol	ND	2.0	3.363	0	39.9	15.8	113			
Phenol	1.8	1.0	3.363	0	52.5	25.1	124			
Pyrene	ND	1.0	1.686	0	42.4	35.8	124			
1,2,4-Trichlorobenzene	ND	1.0	1.686	0	58.2	30	113			
Surr: 2,4,6-Tribromophenol	1.1		3.363		32.2	36.5	113			S
Surr: 2-Fluorobiphenyl	1.1		1.686		68.0	43.3	111			
Surr: 2-Fluorophenol	1.8		3.363		53.1	32.2	118			
Surr: 4-Terphenyl-d14	0.94		1.686		55.5	29.7	111			
Surr: Nitrobenzene-d5	1.1		1.686		64.9	36.6	132			
Surr: Phenol-d5	1.9		3.363		57.9	28.5	128			

Sample ID	1307a80-001amsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	POND 6-1	Batch ID:	8568	RunNo:	12294					
Prep Date:	7/25/2013	Analysis Date:	7/30/2013	SeqNo:	349615	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.1	0.99	1.658	0	63.4	25.6	142	12.8	22	
4-Chloro-3-methylphenol	ND	2.5	3.307	0	52.5	63.7	100	0	27.3	S
2-Chlorophenol	1.7	0.99	3.307	0	50.7	22.2	126	2.75	26.3	
1,4-Dichlorobenzene	ND	0.99	1.658	0	57.7	12.4	115	200	27.4	
2,4-Dinitrotoluene	ND	2.5	1.658	0	34.6	14.9	142	0	27.4	
N-Nitrosodi-n-propylamine	1.2	0.99	1.658	0	71.8	13.9	136	9.96	22.6	
4-Nitrophenol	ND	1.2	3.307	0	30.4	36.7	130	0	20	S
Pentachlorophenol	ND	2.0	3.307	0	38.9	15.8	113	0	27.1	
Phenol	1.9	0.99	3.307	0	56.9	25.1	124	6.48	32.2	
Pyrene	ND	0.99	1.658	0	36.6	35.8	124	0	29.5	
1,2,4-Trichlorobenzene	ND	0.99	1.658	0	55.6	30	113	0	27.8	
Surr: 2,4,6-Tribromophenol	1.1		3.307		32.2	36.5	113	0	0	S
Surr: 2-Fluorobiphenyl	0.90		1.658		54.5	43.3	111	0	0	
Surr: 2-Fluorophenol	2.0		3.307		61.8	32.2	118	0	0	
Surr: 4-Terphenyl-d14	0.86		1.658		52.0	29.7	111	0	0	
Surr: Nitrobenzene-d5	0.98		1.658		59.4	36.6	132	0	0	
Surr: Phenol-d5	2.1		3.307		63.1	28.5	128	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	lcs-8568		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 8568		RunNo: 12301					
Prep Date:	7/25/2013		Analysis Date: 7/31/2013		SeqNo: 349866		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.20	1.670	0	99.0	45.8	95.8			S
4-Chloro-3-methylphenol	3.0	0.50	3.330	0	91.3	49.9	103			
2-Chlorophenol	2.9	0.20	3.330	0	88.3	43.4	94			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.2	37.3	95.4			
2,4-Dinitrotoluene	1.6	0.50	1.670	0	94.7	51.6	113			
N-Nitrosodi-n-propylamine	1.7	0.20	1.670	0	103	43.4	105			
4-Nitrophenol	2.0	0.25	3.330	0	59.0	45.4	113			
Pentachlorophenol	2.3	0.40	3.330	0	70.2	40	90.2			
Phenol	1.8	0.20	3.330	0	54.2	44.4	99.8			
Pyrene	1.9	0.20	1.670	0	115	48.1	93.1			S
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	84.1	41.6	103			
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	36.5	113			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.2	43.3	111			
Surr: 2-Fluorophenol	2.7		3.330		81.6	32.2	118			
Surr: 4-Terphenyl-d14	1.9		1.670		115	29.7	111			S
Surr: Nitrobenzene-d5	1.5		1.670		90.1	36.6	132			
Surr: Phenol-d5	1.9		3.330		57.4	28.5	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1307A80

RcptNo: 1

Received by/date:

AG 07/24/13

Logged By: Anne Thorne

7/24/2013 8:00:00 AM



Completed By: Anne Thorne

7/24/2013



Reviewed By:

IO

07/24/13

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes			

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Tuesday, April 01, 2014 11:39 AM
To: Powell, Brandon, EMNRD; Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Johnson, Cheryl
Subject: C-141
Attachments: 201404011116.pdf

To all,

Attached is the initial C-141 for the release reported to you on March 19, 2014. I am also answering Kristen's and Carl's questions from your March 20 emails in a separate letter to be sent this week.

Thanks
Ed

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Western Refining Southwest, Incorporated	Contact	Ed Riege
Address	92 Giant Crossing Road Gallup NM 87301	Telephone No.	505-722-0217
Facility Name	Western Refining Southwest Gallup Refinery	Facility Type	Petroleum Refinery
Surface Owner	Mineral Owner	API No.	

LOCATION OF RELEASE

Unit Letter	Section 23 and 33	Township 15N	Range 15W	Feet from the	North/South Line	Feet from the	East/West Line	County	Mckinley
-------------	-------------------------	-----------------	--------------	---------------	------------------	---------------	----------------	--------	----------

Latitude 35° 29' 22'' Longitude 108° 25' 24''

NATURE OF RELEASE

Type of Release	Pond Water	Volume of Release	17.4 bbls	Volume Recovered	None
Source of Release	Evaporation Pond #7	Date and Hour of Occurrence	03-19-2014 1500 hr	Date and Hour of Discovery	03-19-2014 1515 hr
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Message Brandon Powell phone / email Carl Chavez phone / email Kristen Van Horn phone / email		
By Whom?	Ed Riege	Date and Hour	03-19-2014 1805 hr 03-19-2014 1810 hr 03-19-2014 1815 hr		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					

Describe Cause of Problem and Remedial Action Taken.*

A Western employee observed a breach in the pond 7 dike. Western was in the process of improving the pond dikes and earth moving equipment, which was operating nearby, immediately responded to make repairs and stopped the release at 1630Hr.

Western has collected a sample of the water, which flowed through the breach, and soil samples from the impacted area. These samples are being analyzed for volatile organic compounds (VOCs), SVOCs, Diesel Range Organics (extended), New Mexico Water Quality Control Criteria metals, and major cation/anions. The results of the above listed analyses will help to direct any subsequent corrective action steps. The NM State land map indicates the owner of the property west of Pond 7 belongs to the state of New Mexico.

To address any concerns about seepage through the dikes or failure of the perimeter dikes, Western contracted Franklin Earthmoving Inc. to improve approximately 80% of the existing pond dikes. This work began in late January 2014 and is expected to continue through mid to late April. This work consists of widening the dikes and improving the outside slope of the berms, and repairing water and wind erosion to the top of the dikes (see enclosed pictures). The area of the breach at pond 7 was the original dike that had not yet been improved by Franklin as they were working approximately 150 yards northeast of the breach. The area impacted by the breach will be rebuilt to prevent any future breaches/seeps.

In addition to the physical improvement of the pond perimeter dikes, Western is pursuing the installation of a more aggressive evaporation system and water conservation measures. These measures should control free board levels and help prevent future seepage through the dikes and breaching of the dikes. Shallow groundwater is routinely monitored in the area and there is no indication of impacts to groundwater from the evaporation ponds.

Describe Area Affected and Cleanup Action Taken.*

It is estimated that 17.4 bbls of wastewater left the pond with possibly half crossing the fence line west of the dike. The small volume of water was absorbed by the dry soil and the release did not reach a watercourse or waters of the U.S. The results of the above listed analyses will help to direct any subsequent corrective action steps

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Ed Riege</i>		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: <i>Ed Riege</i>			
Title: <i>Environmental Manager</i>		Approved by Environmental Specialist:	
E-mail Address: <i>ed.riege@wnr.com</i>		Approval Date:	Expiration Date:
Date: <i>4-1-14</i> Phone: <i>505-722-0217</i>		Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: VanHorn, Kristen, NMENV
Sent: Thursday, March 20, 2014 12:01 PM
To: Riege, Ed; Larsen, Thurman; Johnson, Cheryl (Cheryl.Johnson@wnr.com)
Cc: Cobrain, Dave, NMENV; Dhawan, Neelam, NMENV; Chavez, Carl J, EMNRD
Subject: Breach at EP-7

Ed,

I received your voicemail and email regarding the breach at Pond 7.

To summarize, at around 3pm on March 19, 2014 an employee observed a breach at Pond 7. Western had some earth moving equipment in the area and immediately responded and were able to stop the release by 430pm. An estimated that 17.4 bbls of wastewater left the pond with half crossing the fence line west of the dike which was absorbed by dry soil. The release did not reach a watercourse or a water of the US. Western will monitor the repaired area and [collect](#) soil samples for laboratory analysis from both on- and off-site locations within the affected area. Western will also prepare an initial C-141 form.

Pond 7 is part of the Solid Waste Management Unit (SWMU) 1, the Aeration Basin. This release is a release of solid waste from SWMU 1. Because the release left the property boundary, Western must follow Permit Section IV.B.1 (Corrective Action Beyond the Facility Boundary), which reads in part "The Permittee shall notify the NMED, orally and in writing in accordance with Permit Section II.C.2.c, upon discovery that a release of hazardous waste or hazardous constituents has migrated beyond the facility boundary..." The phone call and C-141 cover the requirement in Permit Section II.C.2.c. Pond 7 has arsenic above screening levels as well as manganese, selenium, phenol, and bis(2-ethyl hexyl)phthalate based on the 2012 evaporation pond sampling results. Western must follow corrective action procedures as outlined in the permit.

In May of 2013 the Surface Water Quality Bureau noted that there was some seepage from Pond 7 (and Pond 8) and noted that the way the seepage was occurring was a concern because the water is not captured prior to Outfall 001 and could essentially become an uncontrolled point of discharge of process water. In your report, clarify whether or not anything was done since May to address the seepage issue.

Western submitted a C-141 Report at the Oil Conservation Division's request in July 2013 and noted that "in response to the potential release of chemical constituents from some of the evaporation ponds during a time period when high pond levels caused seepage along the pond perimeter dikes. As noted in the C-141 Form, soil samples collected from around the perimeter of the ponds were to be analyzed for semi-volatile organics and chloride. As shown in the attached laboratory report, all analyses for semi-volatile organics were non-detect. The analyses for chloride indicate chloride concentrations in excess of the concentrations detected in the three background soil samples. The attached draft map shows the chloride concentrations around the ponds and in the three background samples." Samples were not collected for metals analysis, ensure that metals analysis are included in the breach soil samples. Western must also test for DRO-extended. Also discuss what is being done to ensure that pond levels are maintained at manageable levels.

In your letter report, please include photos of the area, repair of the dike, and cleanup activities.

If you have any questions, please contact me.

Kristen Van Horn
NMED Hazardous Waste Bureau

2905 Rodeo Park Drive East
Building 1
Santa Fe, NM 87505
Phone: 505-476-6046
Email: Kristen.VanHorn@state.nm.us

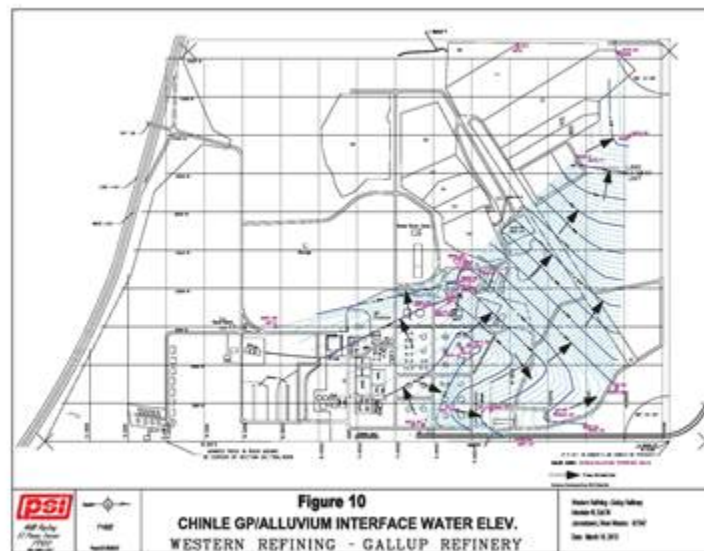
Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, March 20, 2014 7:40 AM
To: 'Riege, Ed'; Powell, Brandon, EMNRD
Cc: VanHorn, Kristen, NMENV; Larsen, Thurman; Johnson, Cheryl; Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD
Subject: RE: Minor Release
Attachments: Gallup Refinery Ponds Area.pdf

Ed:

The New Mexico Oil Conservation Division (OCD) recently approved further investigation of pond breaching that was first observed in the same general vicinity by the NMED in July of 2013 during a stormwater inspection.

Could you please update OCD on the environmental investigation (see figure below) and is Western considering lining the ponds to prevent continued breaches of the pond network?



OCD provides an attachment with more background on the area of the release and potential for impacts to the Upper Puerco Watershed.

Thank you.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive, Santa Fe, New Mexico 87505
O: (505) 476-3490
E-mail: CarlJ.Chavez@State.NM.US
Web: <http://www.emnrd.state.nm.us/ocd/>

“Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?” To see how, please go to: “Pollution Prevention & Waste Minimization” at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

From: Riege, Ed [<mailto:Ed.Riege@wnr.com>]

Sent: Wednesday, March 19, 2014 6:38 PM

To: Powell, Brandon, EMNRD

Cc: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; Larsen, Thurman; Johnson, Cheryl

Subject: Minor Release

Brandon,

As per our phone conversation this evening here is a short summary of the minor release. At 1515 hr on March 19, one of our employees making his rounds at the ponds observed a breach in pond 7 dike. We estimate the leak started around 1500 hr. Western had some earth moving equipment (Franklin Earthmoving) in the pond area and they immediately responded with their heavy equipment and were able to make repairs and stopped the release at 1630 hr. It is estimated that 17.4 bbls of wastewater left the pond with half crossing the fence line west of the dike which was absorbed by the dry soil. The release did not reach a watercourse or a water of the US. Western will monitor the repaired area and take soil samples from the spill site. Western will also prepare an initial C-141 form and send to you.

Thanks,

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
92 Giant Crossing Road
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

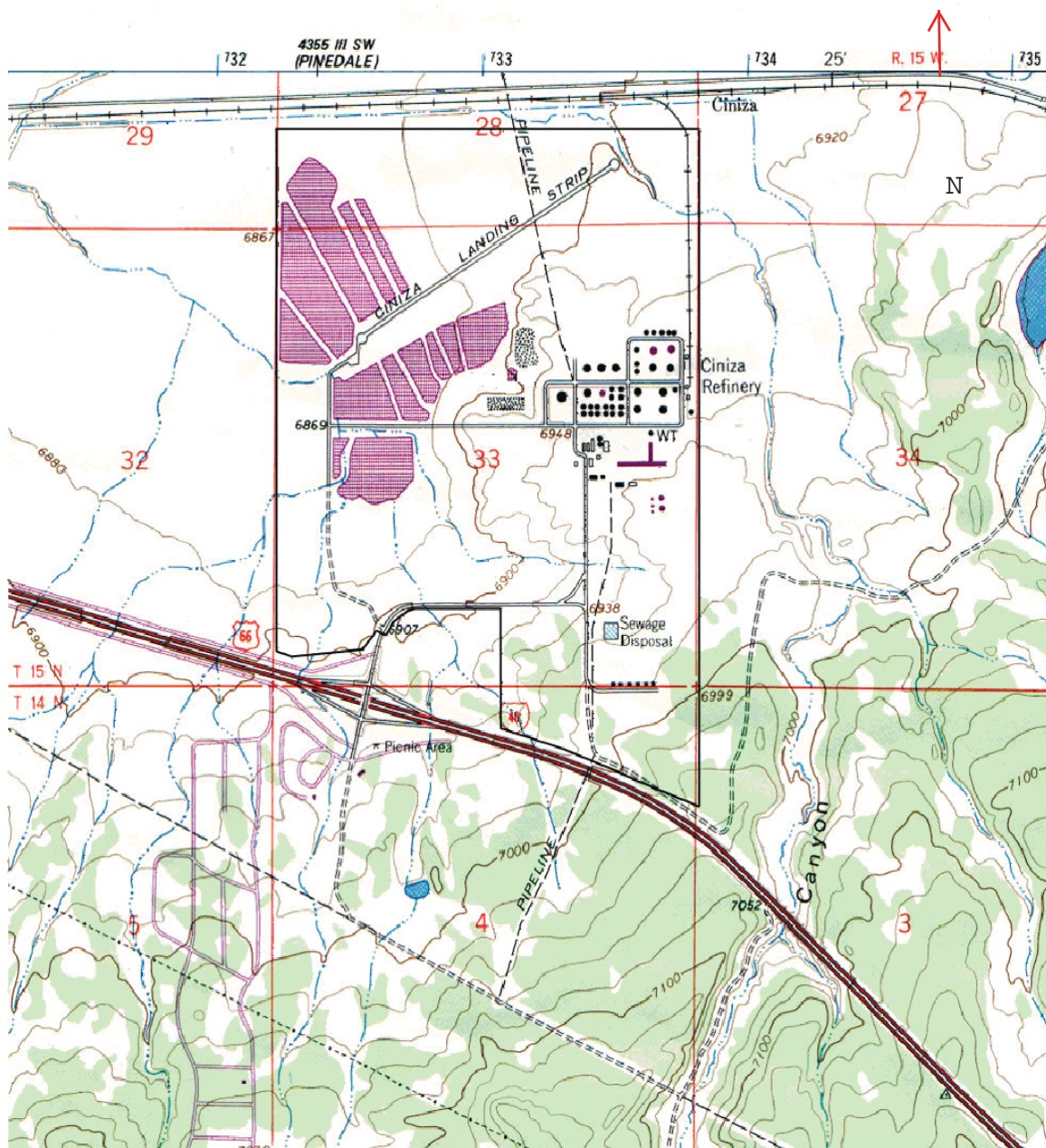
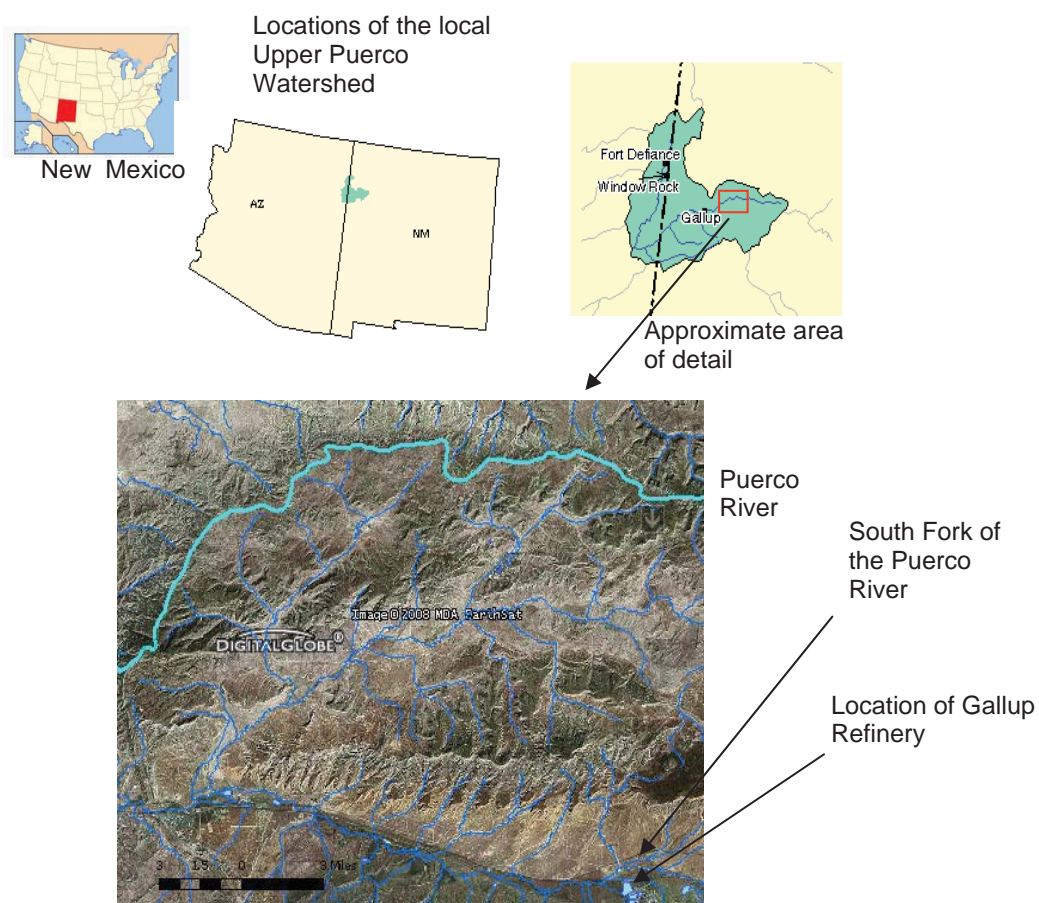


Figure 2: Topographic Map of the Gallup Refinery Site - USGS Topographical Map - Gallup Quadrangle (Revised 1980)



Figure 3: Aerial photograph of the Gallup Refinery

Figure 4: Regional scale: Flow lines and major surface water bodies (from: EPA Enviromapper - <http://map24.epa.gov/EMR/?ZoomToWatershed=15020006>) North is towards the top of the page.



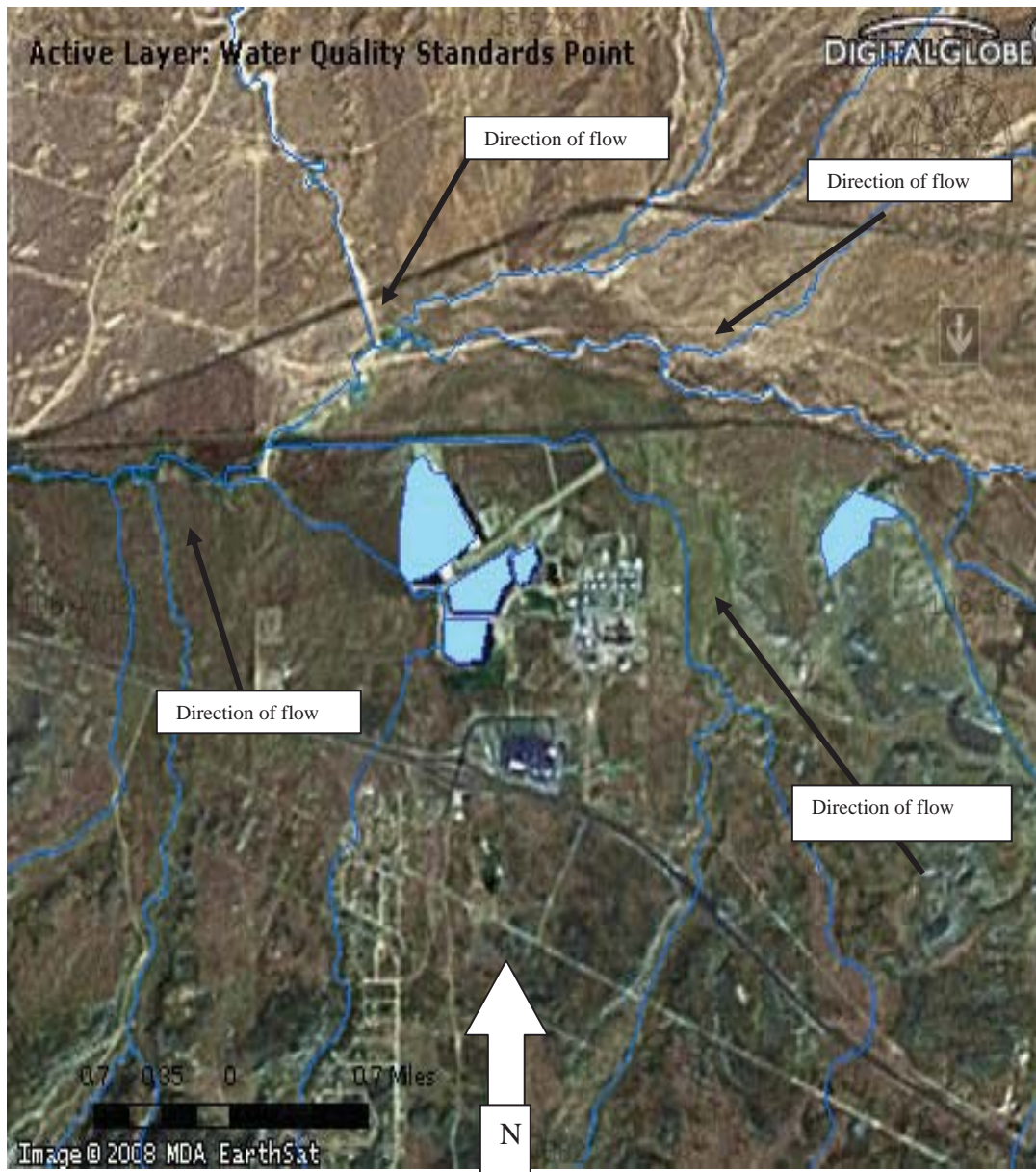


Figure 5: Localized scale: Flow lines and major surface water bodies (from: EPA EnviroMapper - <http://map24.epa.gov/EMR/?ZoomToWatershed=15020006>) North is towards the top of the page. The pond to the east is Jon Myers' Livestock Pond.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, February 07, 2014 4:25 PM
To: 'Riege, Ed'; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch
Subject: RE: Evaporation Pond Chlorides
Attachments: C-141 EP Seeps 2-7-2014.pdf

Ed:

The answer to your question in Western's October 14, 2013 letter (see attachment) is "Yes".

Please proceed. Sorry for the late response.

Thank you.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division, Environmental Bureau

1220 South St. Francis Drive, Santa Fe, New Mexico 87505

O: (505) 476-3490

E-mail: CarlJ.Chavez@State.NM.US

Web: <http://www.emnrd.state.nm.us/ocd/>

“Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?” To see how, please go to: “Pollution Prevention & Waste Minimization” at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

-----Original Message-----

From: Riege, Ed [<mailto:Ed.Riege@wnr.com>]

Sent: Monday, October 14, 2013 8:18 AM

To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD

Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch

Subject: Evaporation Pond Chlorides

Carl,

Please see attached letter regarding chlorides from evaporation pond seepage. Signed hard copy is in the mail.

Thanks,

Ed

Ed Riege MPH

Environmental Manager

Western Refining

Gallup Refinery

Route 3 Box 7

Gallup, NM 87301

(505) 722-0217

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Monday, October 14, 2013 8:18 AM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch
Subject: Evaporation Pond Chlorides
Attachments: perimeter soil samples - Rpt_1307A80_Final_v1.pdf; DRAFT - Chloride Concentration Map.pdf; 201310140811.pdf

Carl,
Please see attached letter regarding chlorides from evaporation pond seepage. Signed hard copy is in the mail.
Thanks,
Ed

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

Certified Mail #7011 2970 0003 9281 8404

October 14, 2013

Mr. Carl Chavez
Oil Conservation Division
Environmental Bureau
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Re: Remediation Standards for Chlorides From Pond Dike Seepage

Dear Mr. Chavez:

Western submitted a C-141 Form on July 18, 2013 in response to the potential release of chemical constituents from some of the evaporation ponds during a time period when high pond levels caused seepage along the pond perimeter dikes. As noted in the C-141 Form, soil samples collected from around the perimeter of the ponds were to be analyzed for semi-volatile organics and chloride. As shown in the attached laboratory report, all analyses for semi-volatile organics were non-detect. The analyses for chloride indicate chloride concentrations in excess of the concentrations detected in the three background soil samples. The attached draft map shows the chloride concentrations around the ponds and in the three background samples.

We reviewed the OCD rules (Parts 1 through 39 of Title 19, Chapter 15) to identify appropriate remediation standards for chlorides in soils and noted that the new "pit" rules in 19.15.17.13 do provide specific remediation standards for chloride. The values in Table 1, which apply to situations where the pit contents are removed, appear to be appropriate remediation standards for the chloride we have identified in soils near some of the evaporation ponds. Before proceeding further with any additional sampling and/or remediation, I would like to get confirmation that the remediation standards for chloride in Table 1 of 19.15.17.13 are acceptable standards to guide our actions.

Please contact me at (505) 722-0217 if you have any or questions regarding this submittal.

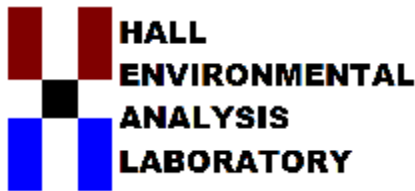
Sincerely,



Ed Riege
Environmental Manager

C: Glen VonGonten - email
Kristen Van Horn- email





Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 06, 2013

Cheryl Johnson

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL: (505) 722-0231

FAX (505) 722-0210

RE: MSGP INSPECTION REPORT

OrderNo.: 1307A80

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 7/24/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:02:00 AM

Lab ID: 1307A80-001

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	4300	300		mg/Kg	200	7/30/2013 8:03:56 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:02:00 AM

Lab ID: 1307A80-001

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Surr: 2,4,6-Tribromophenol	41.0	36.5-113		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 2-Fluorobiphenyl	94.2	43.3-111		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 2-Fluorophenol	88.2	32.2-118		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 4-Terphenyl-d14	78.0	29.7-111		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: Nitrobenzene-d5	91.6	36.6-132		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: Phenol-d5	91.4	28.5-128		%REC	1	7/30/2013 9:37:41 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:17:00 AM

Lab ID: 1307A80-002

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	14000	750		mg/Kg	500	7/30/2013 8:16:20 PM	8576
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Aniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Carbazole	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Chrysene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:17:00 AM

Lab ID: 1307A80-002

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Fluorene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Isophorone	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Phenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pyridine	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Surr: 2,4,6-Tribromophenol	43.9	36.5-113		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 2-Fluorobiphenyl	78.1	43.3-111		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 2-Fluorophenol	71.8	32.2-118		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 4-Terphenyl-d14	71.3	29.7-111		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: Nitrobenzene-d5	69.0	36.6-132		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: Phenol-d5	69.0	28.5-128		%REC	1	7/30/2013 12:46:46 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:30:00 AM

Lab ID: 1307A80-003

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	8800	750		mg/Kg	500	7/30/2013 8:28:45 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:30:00 AM

Lab ID: 1307A80-003

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Isophorone	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pyridine	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Surr: 2,4,6-Tribromophenol	42.3	36.5-113		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 2-Fluorobiphenyl	59.2	43.3-111		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 2-Fluorophenol	61.5	32.2-118		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 4-Terphenyl-d14	71.1	29.7-111		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: Nitrobenzene-d5	72.6	36.6-132		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: Phenol-d5	58.5	28.5-128		%REC	1	7/29/2013 8:27:52 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:45:00 AM

Lab ID: 1307A80-004

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	13000	750		mg/Kg	500	7/30/2013 8:41:09 PM	8576
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Acenaphthylene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Aniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Azobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benz(a)anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(a)pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(b)fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(g,h,i)perylene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(k)fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzoic acid	ND	0.97		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzyl alcohol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroethoxy)methane	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroethyl)ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Bromophenyl phenyl ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Butyl benzyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Carbazole	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Chloronaphthalene	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Chlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chlorophenyl phenyl ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Chrysene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dibenz(a,h)anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dibenzofuran	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,2-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,3-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,4-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3,3'-Dichlorobenzidine	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Diethyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dimethyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dimethylphenol	ND	0.29		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:45:00 AM

Lab ID: 1307A80-004

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Fluorene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorobutadiene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorocyclopentadiene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachloroethane	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Isophorone	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1-Methylnaphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Methylnaphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3+4-Methylphenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
N-Nitrosodi-n-propylamine	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
N-Nitrosodiphenylamine	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Naphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Nitroaniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3-Nitroaniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Nitrophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Nitrophenol	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Phenanthrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Phenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pyridine	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,2,4-Trichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4,5-Trichlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4,6-Trichlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Surr: 2,4,6-Tribromophenol	43.8	36.5-113		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 2-Fluorobiphenyl	64.1	43.3-111		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 2-Fluorophenol	67.2	32.2-118		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 4-Terphenyl-d14	66.9	29.7-111		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: Nitrobenzene-d5	68.8	36.6-132		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: Phenol-d5	75.9	28.5-128		%REC	1	7/30/2013 1:15:38 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:00:00 AM

Lab ID: 1307A80-005

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/30/2013 8:53:33 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 8-1**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 10:00:00 AM**Lab ID:** 1307A80-005**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Surr: 2,4,6-Tribromophenol	38.9	36.5-113		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 2-Fluorobiphenyl	68.5	43.3-111		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 2-Fluorophenol	73.9	32.2-118		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 4-Terphenyl-d14	59.4	29.7-111		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: Nitrobenzene-d5	67.2	36.6-132		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: Phenol-d5	62.9	28.5-128		%REC	1	7/29/2013 8:56:40 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:15:00 AM

Lab ID: 1307A80-006

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	12000	300		mg/Kg	200	7/30/2013 9:05:58 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Acenaphthylene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Aniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Azobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzoic acid	ND	2.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzyl alcohol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Carbazole	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chloroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Chlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Chrysene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dibenzofuran	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Diethyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 8-2**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 10:15:00 AM**Lab ID:** 1307A80-006**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Fluorene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachloroethane	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Isophorone	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Naphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Nitroaniline	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Nitrobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Nitrophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Nitrophenol	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pentachlorophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Phenanthrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Phenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pyridine	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Surr: 2,4,6-Tribromophenol	23.7	36.5-113	S	%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 2-Fluorobiphenyl	53.8	43.3-111		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 2-Fluorophenol	44.7	32.2-118		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 4-Terphenyl-d14	48.0	29.7-111		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: Nitrobenzene-d5	45.9	36.6-132		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: Phenol-d5	47.9	28.5-128		%REC	1	7/30/2013 12:18:12 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:30:00 AM

Lab ID: 1307A80-007

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	21000	750		mg/Kg	500	7/30/2013 2:53:42 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:30:00 AM

Lab ID: 1307A80-007

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Surr: 2,4,6-Tribromophenol	48.6	36.5-113		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 2-Fluorobiphenyl	77.4	43.3-111		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 2-Fluorophenol	83.7	32.2-118		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 4-Terphenyl-d14	67.2	29.7-111		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: Nitrobenzene-d5	82.7	36.6-132		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: Phenol-d5	82.1	28.5-128		%REC	1	7/29/2013 9:25:29 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-4

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:45:00 AM

Lab ID: 1307A80-008

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	16000	750		mg/Kg	500	7/30/2013 3:18:31 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzoic acid	ND	5.1		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 8-4**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 10:45:00 AM**Lab ID:** 1307A80-008**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Surr: 2,4,6-Tribromophenol	44.3	36.5-113		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 2-Fluorobiphenyl	87.4	43.3-111		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 2-Fluorophenol	101	32.2-118		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 4-Terphenyl-d14	83.4	29.7-111		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: Nitrobenzene-d5	93.7	36.6-132		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: Phenol-d5	97.6	28.5-128		%REC	1	7/30/2013 12:35:14 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-5

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:00:00 AM

Lab ID: 1307A80-009

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 3:43:20 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-5

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:00:00 AM

Lab ID: 1307A80-009

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Surr: 2,4,6-Tribromophenol	41.4	36.5-113		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 2-Fluorobiphenyl	77.3	43.3-111		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 2-Fluorophenol	77.4	32.2-118		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 4-Terphenyl-d14	69.1	29.7-111		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: Nitrobenzene-d5	73.9	36.6-132		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: Phenol-d5	78.8	28.5-128		%REC	1	7/29/2013 9:54:16 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:15:00 AM

Lab ID: 1307A80-010

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	3300	750		mg/Kg	500	7/30/2013 4:08:10 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:15:00 AM

Lab ID: 1307A80-010

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Surr: 2,4,6-Tribromophenol	39.0	36.5-113		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 2-Fluorobiphenyl	82.9	43.3-111		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 2-Fluorophenol	87.2	32.2-118		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 4-Terphenyl-d14	72.4	29.7-111		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: Nitrobenzene-d5	67.0	36.6-132		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: Phenol-d5	83.2	28.5-128		%REC	1	7/30/2013 1:04:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:30:00 AM

Lab ID: 1307A80-011

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 4:33:00 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:30:00 AM

Lab ID: 1307A80-011

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Isophorone	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pyridine	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Surr: 2,4,6-Tribromophenol	20.9	36.5-113	S	%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 2-Fluorobiphenyl	43.1	43.3-111	S	%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 2-Fluorophenol	44.1	32.2-118		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 4-Terphenyl-d14	44.1	29.7-111		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: Nitrobenzene-d5	41.8	36.6-132		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: Phenol-d5	41.3	28.5-128		%REC	1	7/29/2013 10:23:04 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 11-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:45:00 AM

Lab ID: 1307A80-012

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/31/2013 4:14:09 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 11-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:45:00 AM

Lab ID: 1307A80-012

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Surr: 2,4,6-Tribromophenol	48.2	36.5-113		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 2-Fluorobiphenyl	79.0	43.3-111		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 2-Fluorophenol	76.4	32.2-118		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 4-Terphenyl-d14	66.7	29.7-111		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: Nitrobenzene-d5	70.5	36.6-132		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: Phenol-d5	69.8	28.5-128		%REC	1	7/29/2013 10:51:50 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:00:00 PM

Lab ID: 1307A80-013

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/30/2013 5:47:25 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Acenaphthylene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Aniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Azobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzoic acid	ND	10		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzyl alcohol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Carbazole	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chloroaniline	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Chlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Chrysene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dibenzofuran	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Diethyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:00:00 PM

Lab ID: 1307A80-013

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Fluorene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachloroethane	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Isophorone	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Naphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Nitroaniline	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Nitrobenzene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Nitrophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Nitrophenol	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pentachlorophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Phenanthrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Phenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pyridine	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Surr: 2,4,6-Tribromophenol	33.7	36.5-113	S	%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 2-Fluorobiphenyl	77.8	43.3-111		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 2-Fluorophenol	65.2	32.2-118		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 4-Terphenyl-d14	67.1	29.7-111		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: Nitrobenzene-d5	71.1	36.6-132		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: Phenol-d5	76.0	28.5-128		%REC	1	7/30/2013 1:33:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:40:00 PM

Lab ID: 1307A80-014

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	1100	30		mg/Kg	20	7/30/2013 5:59:49 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:40:00 PM

Lab ID: 1307A80-014

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Surr: 2,4,6-Tribromophenol	45.5	36.5-113		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 2-Fluorobiphenyl	87.1	43.3-111		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 2-Fluorophenol	65.6	32.2-118		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 4-Terphenyl-d14	91.9	29.7-111		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: Nitrobenzene-d5	74.0	36.6-132		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: Phenol-d5	73.3	28.5-128		%REC	1	7/30/2013 2:02:27 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:50:00 PM

Lab ID: 1307A80-015

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	1500	750		mg/Kg	500	7/30/2013 6:37:03 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:50:00 PM

Lab ID: 1307A80-015

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Surr: 2,4,6-Tribromophenol	52.4	36.5-113		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 2-Fluorobiphenyl	93.3	43.3-111		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 2-Fluorophenol	72.3	32.2-118		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 4-Terphenyl-d14	85.0	29.7-111		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: Nitrobenzene-d5	80.3	36.6-132		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: Phenol-d5	71.5	28.5-128		%REC	1	7/29/2013 11:20:36 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 1:00:00 PM

Lab ID: 1307A80-016

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	980	30		mg/Kg	20	7/30/2013 6:49:28 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 1:00:00 PM

Lab ID: 1307A80-016

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Surr: 2,4,6-Tribromophenol	46.4	36.5-113		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 2-Fluorobiphenyl	81.7	43.3-111		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 2-Fluorophenol	69.3	32.2-118		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 4-Terphenyl-d14	76.8	29.7-111		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: Nitrobenzene-d5	88.5	36.6-132		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: Phenol-d5	74.9	28.5-128		%REC	1	7/29/2013 11:49:25 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	MB-8576		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 8576		RunNo: 12237					
Prep Date:	7/26/2013		Analysis Date: 7/26/2013		SeqNo: 348052		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-8576		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 8576		RunNo: 12237					
Prep Date:	7/26/2013		Analysis Date: 7/26/2013		SeqNo: 348053		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

Sample ID	MB-8634		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	8634		RunNo:	12307				
Prep Date:	7/30/2013		Analysis Date:	7/30/2013		SeqNo:	350015		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-8634		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 8634		RunNo: 12307					
Prep Date:	7/30/2013		Analysis Date: 7/30/2013		SeqNo: 350016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	mb-8568	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	8568	RunNo:	12261					
Prep Date:	7/25/2013	Analysis Date:	7/29/2013	SeqNo:	348582	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	1.0								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	mb-8568		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 8568		RunNo: 12261					
Prep Date:	7/25/2013		Analysis Date: 7/29/2013		SeqNo: 348582		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	0.96		3.330		28.9	36.5	113			S
Surr: 2-Fluorobiphenyl	1.2		1.670		74.7	43.3	111			
Surr: 2-Fluorophenol	2.0		3.330		60.0	32.2	118			
Surr: 4-Terphenyl-d14	1.1		1.670		64.7	29.7	111			
Surr: Nitrobenzene-d5	1.3		1.670		80.6	36.6	132			
Surr: Phenol-d5	2.4		3.330		71.4	28.5	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	1307a80-001ams	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	POND 6-1	Batch ID:	8568	RunNo:	12294					
Prep Date:	7/25/2013	Analysis Date:	7/30/2013	SeqNo:	349614	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	1.0	1.686	0	70.9	25.6	142			
4-Chloro-3-methylphenol	ND	2.5	3.363	0	51.8	63.7	100			S
2-Chlorophenol	1.7	1.0	3.363	0	51.2	22.2	126			
1,4-Dichlorobenzene	1.1	1.0	1.686	0	63.4	12.4	115			
2,4-Dinitrotoluene	ND	2.5	1.686	0	33.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	1.0	1.686	0	63.9	13.9	136			
4-Nitrophenol	ND	1.3	3.363	0	30.5	36.7	130			S
Pentachlorophenol	ND	2.0	3.363	0	39.9	15.8	113			
Phenol	1.8	1.0	3.363	0	52.5	25.1	124			
Pyrene	ND	1.0	1.686	0	42.4	35.8	124			
1,2,4-Trichlorobenzene	ND	1.0	1.686	0	58.2	30	113			
Surr: 2,4,6-Tribromophenol	1.1		3.363		32.2	36.5	113			S
Surr: 2-Fluorobiphenyl	1.1		1.686		68.0	43.3	111			
Surr: 2-Fluorophenol	1.8		3.363		53.1	32.2	118			
Surr: 4-Terphenyl-d14	0.94		1.686		55.5	29.7	111			
Surr: Nitrobenzene-d5	1.1		1.686		64.9	36.6	132			
Surr: Phenol-d5	1.9		3.363		57.9	28.5	128			

Sample ID	1307a80-001amsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	POND 6-1	Batch ID:	8568	RunNo:	12294					
Prep Date:	7/25/2013	Analysis Date:	7/30/2013	SeqNo:	349615	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.1	0.99	1.658	0	63.4	25.6	142	12.8	22	
4-Chloro-3-methylphenol	ND	2.5	3.307	0	52.5	63.7	100	0	27.3	S
2-Chlorophenol	1.7	0.99	3.307	0	50.7	22.2	126	2.75	26.3	
1,4-Dichlorobenzene	ND	0.99	1.658	0	57.7	12.4	115	200	27.4	
2,4-Dinitrotoluene	ND	2.5	1.658	0	34.6	14.9	142	0	27.4	
N-Nitrosodi-n-propylamine	1.2	0.99	1.658	0	71.8	13.9	136	9.96	22.6	
4-Nitrophenol	ND	1.2	3.307	0	30.4	36.7	130	0	20	S
Pentachlorophenol	ND	2.0	3.307	0	38.9	15.8	113	0	27.1	
Phenol	1.9	0.99	3.307	0	56.9	25.1	124	6.48	32.2	
Pyrene	ND	0.99	1.658	0	36.6	35.8	124	0	29.5	
1,2,4-Trichlorobenzene	ND	0.99	1.658	0	55.6	30	113	0	27.8	
Surr: 2,4,6-Tribromophenol	1.1		3.307		32.2	36.5	113	0	0	S
Surr: 2-Fluorobiphenyl	0.90		1.658		54.5	43.3	111	0	0	
Surr: 2-Fluorophenol	2.0		3.307		61.8	32.2	118	0	0	
Surr: 4-Terphenyl-d14	0.86		1.658		52.0	29.7	111	0	0	
Surr: Nitrobenzene-d5	0.98		1.658		59.4	36.6	132	0	0	
Surr: Phenol-d5	2.1		3.307		63.1	28.5	128	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	Ics-8568		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 8568		RunNo: 12301					
Prep Date:	7/25/2013		Analysis Date: 7/31/2013		SeqNo: 349866		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.20	1.670	0	99.0	45.8	95.8			S
4-Chloro-3-methylphenol	3.0	0.50	3.330	0	91.3	49.9	103			
2-Chlorophenol	2.9	0.20	3.330	0	88.3	43.4	94			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.2	37.3	95.4			
2,4-Dinitrotoluene	1.6	0.50	1.670	0	94.7	51.6	113			
N-Nitrosodi-n-propylamine	1.7	0.20	1.670	0	103	43.4	105			
4-Nitrophenol	2.0	0.25	3.330	0	59.0	45.4	113			
Pentachlorophenol	2.3	0.40	3.330	0	70.2	40	90.2			
Phenol	1.8	0.20	3.330	0	54.2	44.4	99.8			
Pyrene	1.9	0.20	1.670	0	115	48.1	93.1			S
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	84.1	41.6	103			
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	36.5	113			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.2	43.3	111			
Surr: 2-Fluorophenol	2.7		3.330		81.6	32.2	118			
Surr: 4-Terphenyl-d14	1.9		1.670		115	29.7	111			S
Surr: Nitrobenzene-d5	1.5		1.670		90.1	36.6	132			
Surr: Phenol-d5	1.9		3.330		57.4	28.5	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1307A80

RcptNo: 1

Received by/date:

AG 07/24/13

Logged By: Anne Thorne

7/24/2013 8:00:00 AM



Completed By: Anne Thorne

7/24/2013



Reviewed By:

IO

07/24/13

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes			

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Tuesday, April 01, 2014 11:39 AM
To: Powell, Brandon, EMNRD; Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Johnson, Cheryl
Subject: C-141
Attachments: 201404011116.pdf

To all,

Attached is the initial C-141 for the release reported to you on March 19, 2014. I am also answering Kristen's and Carl's questions from your March 20 emails in a separate letter to be sent this week.

Thanks
Ed

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Western Refining Southwest, Incorporated	Contact Ed Riege	
Address 92 Giant Crossing Road Gallup NM 87301	Telephone No. 505-722-0217	
Facility Name Western Refining Southwest Gallup Refinery	Facility Type Petroleum Refinery	
Surface Owner	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section 23 and 33	Township 15N	Range 15W	Feet from the	North/South Line	Feet from the	East/West Line	County Mckinley
-------------	-------------------	--------------	-----------	---------------	------------------	---------------	----------------	-----------------

Latitude 35° 29' 22'' Longitude 108° 25' 24''

NATURE OF RELEASE

Type of Release Pond Water	Volume of Release 17.4 bbls	Volume Recovered None
Source of Release Evaporation Pond #7	Date and Hour of Occurrence 03-19-2014 1500 hr	Date and Hour of Discovery 03-19-2014 1515 hr
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Message Brandon Powell phone / email Carl Chavez phone / email Kristen Van Horn phone / email	
By Whom? Ed Riege	Date and Hour 03-19-2014 1805 hr 03-19-2014 1810 hr 03-19-2014 1815 hr	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		

Describe Cause of Problem and Remedial Action Taken.*

A Western employee observed a breach in the pond 7 dike. Western was in the process of improving the pond dikes and earth moving equipment, which was operating nearby, immediately responded to make repairs and stopped the release at 1630Hr.

Western has collected a sample of the water, which flowed through the breach, and soil samples from the impacted area. These samples are being analyzed for volatile organic compounds (VOCs), SVOCs, Diesel Range Organics (extended), New Mexico Water Quality Control Criteria metals, and major cation/anions. The results of the above listed analyses will help to direct any subsequent corrective action steps. The NM State land map indicates the owner of the property west of Pond 7 belongs to the state of New Mexico.

To address any concerns about seepage through the dikes or failure of the perimeter dikes, Western contracted Franklin Earthmoving Inc. to improve approximately 80% of the existing pond dikes. This work began in late January 2014 and is expected to continue through mid to late April. This work consists of widening the dikes and improving the outside slope of the berms, and repairing water and wind erosion to the top of the dikes (see enclosed pictures). The area of the breach at pond 7 was the original dike that had not yet been improved by Franklin as they were working approximately 150 yards northeast of the breach. The area impacted by the breach will be rebuilt to prevent any future breaches/seeps.

In addition to the physical improvement of the pond perimeter dikes, Western is pursuing the installation of a more aggressive evaporation system and water conservation measures. These measures should control free board levels and help prevent future seepage through the dikes and breaching of the dikes. Shallow groundwater is routinely monitored in the area and there is no indication of impacts to groundwater from the evaporation ponds.

Describe Area Affected and Cleanup Action Taken.*

It is estimated that 17.4 bbls of wastewater left the pond with possibly half crossing the fence line west of the dike. The small volume of water was absorbed by the dry soil and the release did not reach a watercourse or waters of the U.S. The results of the above listed analyses will help to direct any subsequent corrective action steps

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Ed Riege</i>		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: <i>Ed Riege</i>			
Title: <i>Environmental Manager</i>		Approved by Environmental Specialist:	
E-mail Address: <i>ed.riege@wnr.com</i>		Approval Date:	Expiration Date:
Date: <i>4-1-14</i> Phone: <i>505-722-0217</i>		Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: VanHorn, Kristen, NMENV
Sent: Thursday, March 20, 2014 12:01 PM
To: Riege, Ed; Larsen, Thurman; Johnson, Cheryl (Cheryl.Johnson@wnr.com)
Cc: Cobrain, Dave, NMENV; Dhawan, Neelam, NMENV; Chavez, Carl J, EMNRD
Subject: Breach at EP-7

Ed,

I received your voicemail and email regarding the breach at Pond 7.

To summarize, at around 3pm on March 19, 2014 an employee observed a breach at Pond 7. Western had some earth moving equipment in the area and immediately responded and were able to stop the release by 430pm. An estimated that 17.4 bbls of wastewater left the pond with half crossing the fence line west of the dike which was absorbed by dry soil. The release did not reach a watercourse or a water of the US. Western will monitor the repaired area and [collect](#) soil samples for laboratory analysis from both on- and off-site locations within the affected area. Western will also prepare an initial C-141 form.

Pond 7 is part of the Solid Waste Management Unit (SWMU) 1, the Aeration Basin. This release is a release of solid waste from SWMU 1. Because the release left the property boundary, Western must follow Permit Section IV.B.1 (Corrective Action Beyond the Facility Boundary), which reads in part "The Permittee shall notify the NMED, orally and in writing in accordance with Permit Section II.C.2.c, upon discovery that a release of hazardous waste or hazardous constituents has migrated beyond the facility boundary..." The phone call and C-141 cover the requirement in Permit Section II.C.2.c. Pond 7 has arsenic above screening levels as well as manganese, selenium, phenol, and bis(2-ethyl hexyl)phthalate based on the 2012 evaporation pond sampling results. Western must follow corrective action procedures as outlined in the permit.

In May of 2013 the Surface Water Quality Bureau noted that there was some seepage from Pond 7 (and Pond 8) and noted that the way the seepage was occurring was a concern because the water is not captured prior to Outfall 001 and could essentially become an uncontrolled point of discharge of process water. In your report, clarify whether or not anything was done since May to address the seepage issue.

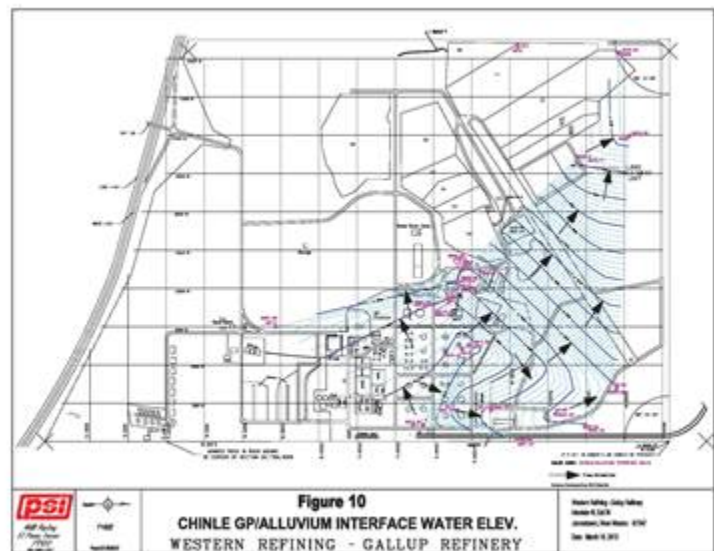
Western submitted a C-141 Report at the Oil Conservation Division's request in July 2013 and noted that "in response to the potential release of chemical constituents from some of the evaporation ponds during a time period when high pond levels caused seepage along the pond perimeter dikes. As noted in the C-141 Form, soil samples collected from around the perimeter of the ponds were to be analyzed for semi-volatile organics and chloride. As shown in the attached laboratory report, all analyses for semi-volatile organics were non-detect. The analyses for chloride indicate chloride concentrations in excess of the concentrations detected in the three background soil samples. The attached draft map shows the chloride concentrations around the ponds and in the three background samples." Samples were not collected for metals analysis, ensure that metals analysis are included in the breach soil samples. Western must also test for DRO-extended. Also discuss what is being done to ensure that pond levels are maintained at manageable levels.

In your letter report, please include photos of the area, repair of the dike, and cleanup activities.

If you have any questions, please contact me.

Kristen Van Horn
NMED Hazardous Waste Bureau

2905 Rodeo Park Drive East
Building 1
Santa Fe, NM 87505
Phone: 505-476-6046
Email: Kristen.VanHorn@state.nm.us



Thank you.

New Mexico Energy, Minerals & Natural Resources Department

1220 South St. Francis Drive, Santa Fe, New Mexico 87505

E-mail: CarlJ.Chavez@State.NM.US

1

“Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?” To see how, please go to: “Pollution Prevention & Waste Minimization” at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

From: Riege, Ed [<mailto:Ed.Riege@wnr.com>]

Sent: Wednesday, March 19, 2014 6:38 PM

To: Powell, Brandon, EMNRD

Cc: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; Larsen, Thurman; Johnson, Cheryl

Subject: Minor Release

Brandon,

As per our phone conversation this evening here is a short summary of the minor release. At 1515 hr on March 19, one of our employees making his rounds at the ponds observed a breach in pond 7 dike. We estimate the leak started around 1500 hr. Western had some earth moving equipment (Franklin Earthmoving) in the pond area and they immediately responded with their heavy equipment and were able to make repairs and stopped the release at 1630 hr. It is estimated that 17.4 bbls of wastewater left the pond with half crossing the fence line west of the dike which was absorbed by the dry soil. The release did not reach a watercourse or a water of the US. Western will monitor the repaired area and take soil samples from the spill site. Western will also prepare an initial C-141 form and send to you.

Thanks,

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
92 Giant Crossing Road
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

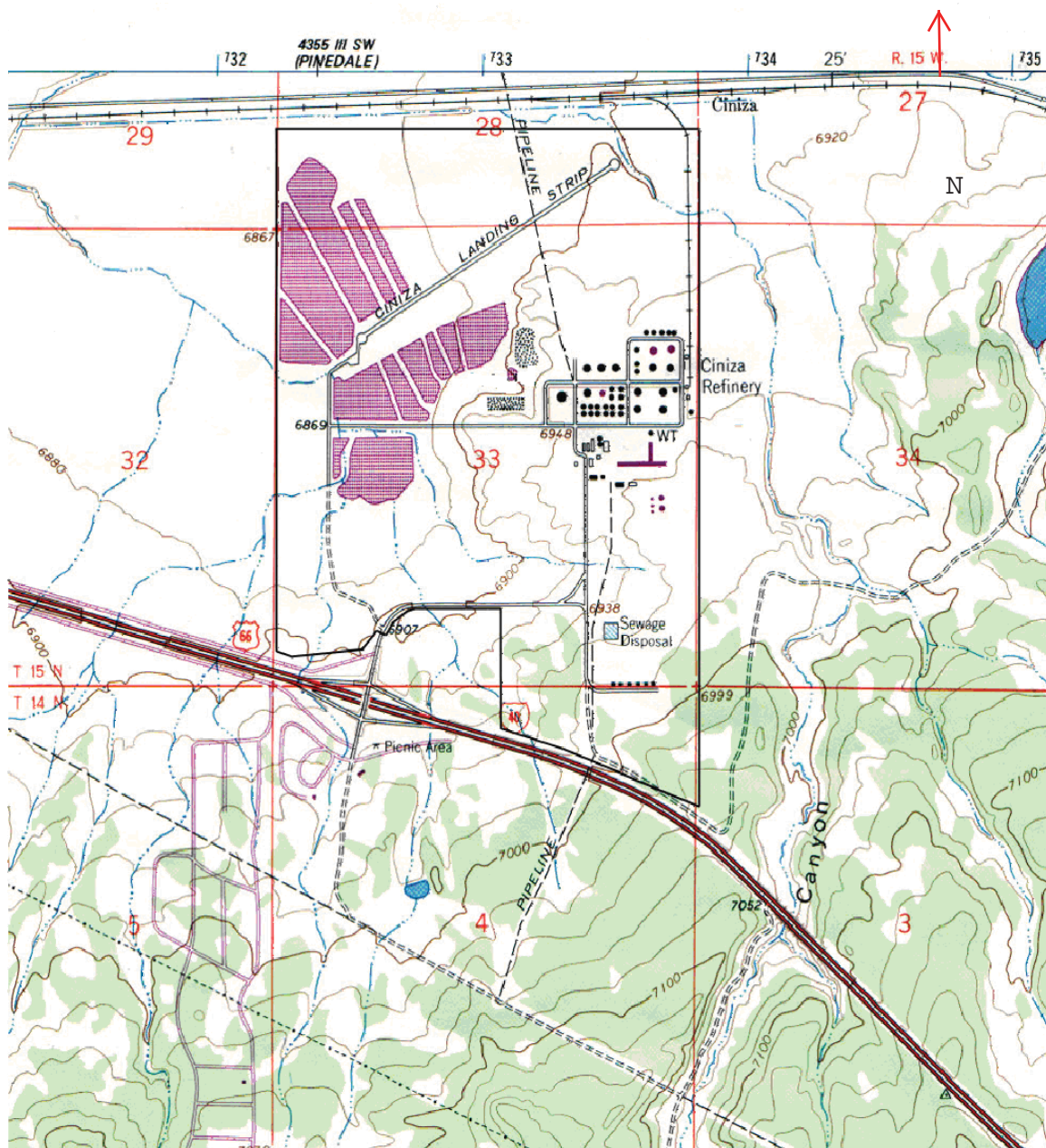
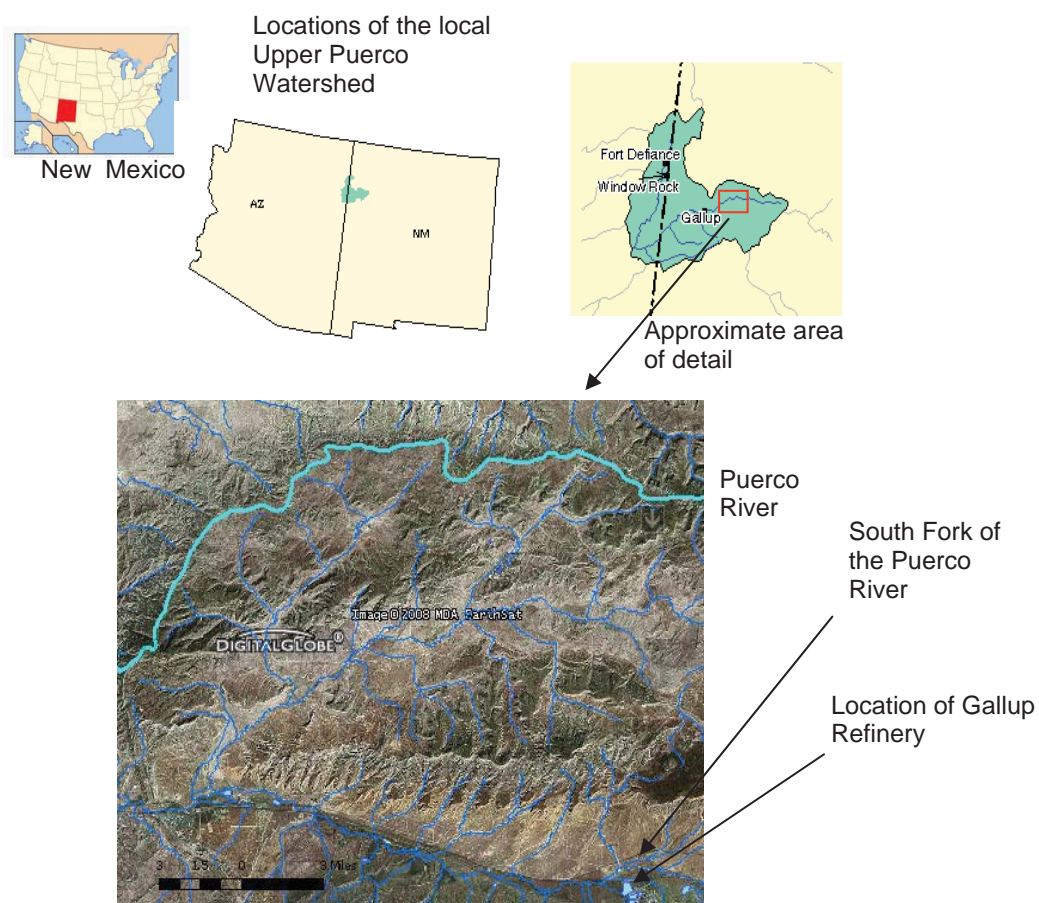


Figure 2: Topographic Map of the Gallup Refinery Site - USGS Topographical Map - Gallup Quadrangle (Revised 1980)



Figure 3: Aerial photograph of the Gallup Refinery

Figure 4: Regional scale: Flow lines and major surface water bodies (from: EPA Enviromapper - <http://map24.epa.gov/EMR/?ZoomToWatershed=15020006>) North is towards the top of the page.



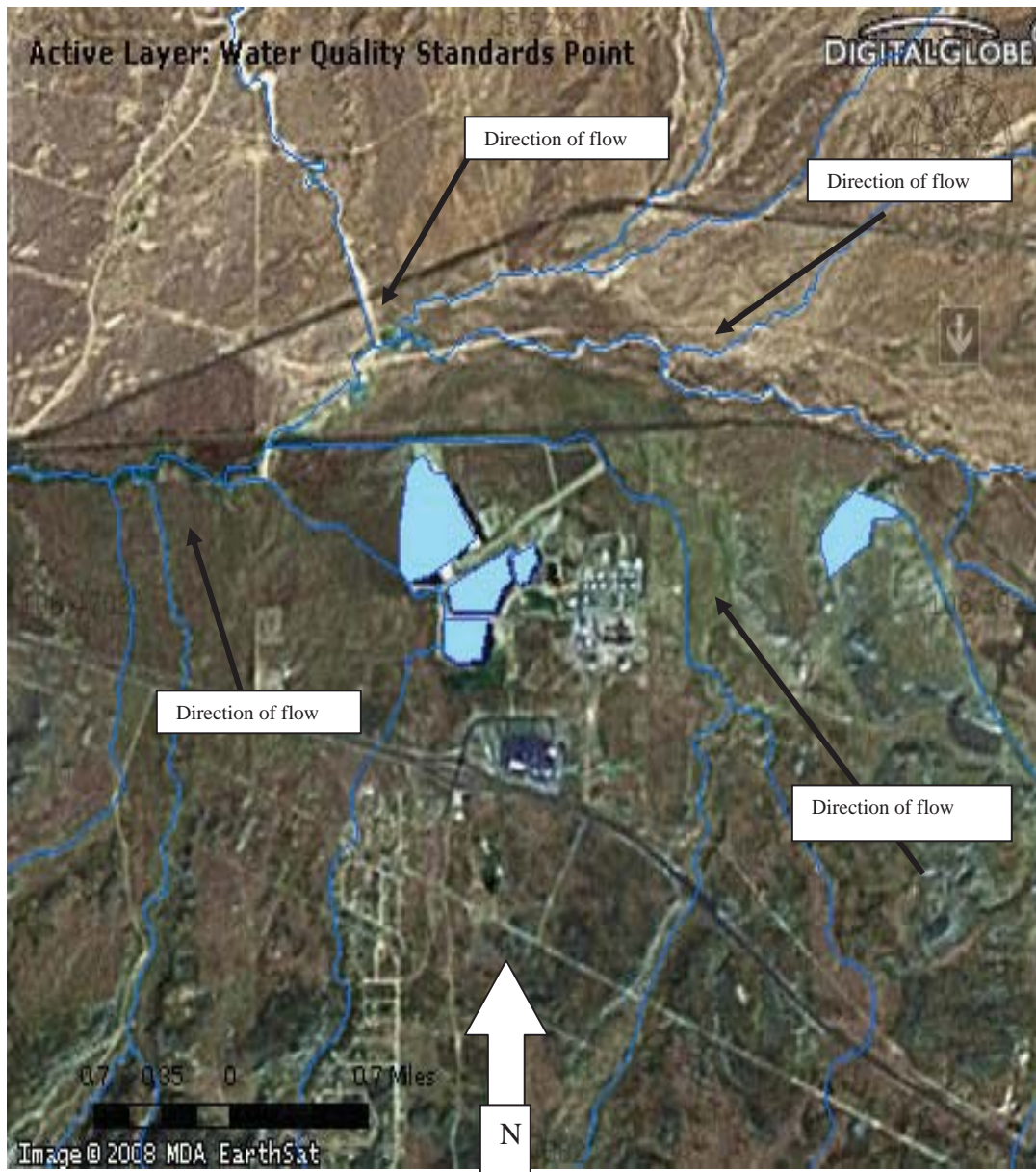


Figure 5: Localized scale: Flow lines and major surface water bodies (from: EPA Enviromapper - <http://map24.epa.gov/EMR/?ZoomToWatershed=15020006>) North is towards the top of the page. The pond to the east is Jon Myers' Livestock Pond.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Western Refining Southwest, Incorporated	Contact Beck Larsen	
Address 92 Giant Crossing Road Gallup NM 87301	Telephone No. 505-722-0217	
Facility Name Western Refining Southwest Gallup Refinery	Facility Type Petroleum Refinery	
Surface Owner	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Fire and hydrocarbon	Volume of Release 5 to 10 bbls	Volume Recovered 6-8 bbls
Source of Release Flare	Date and Hour of Occurrence 12-10-2013 0625 hr	Date and Hour of Discovery 12-10-2013 0630 hr
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? SERC (State Police) ; LEPC (Msg); NMED (AQB- Peggy Evans); OCD (Brandon Powell); OCD (Carl Chavez); NMED (Kristen Van Horn, Msg)	
By Whom? Ed Riege	Date and Hour 12-10-13 SERC (State Police @ 0702); LEPC (Msg @ 0705); NMED (AQB, Peggy Evans @ 0715); OCD (Brandon Powell @ 0720); OCD (Carl Chavez@ 0725); NMED (Kristen Van Horn Msg @ 0729)	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	


If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Freezing in units caused flare knockout drum to fill up, liquid hydrocarbon to ignited causing a flare fire and hydrocarbon (Diesel) to flow out top of flare. Onsite fire department put out fire.

Describe Area Affected and Cleanup Action Taken.* The area impacted was around the base of the flare and diesel/hydrocarbon traveled with firewater to the west for approximately 150 yards (refer to attached map). Absorbent was applied to hydrocarbon, ditch (culvert) was plugged off and a vacuum truck removed visible hydrocarbon. Initial confirmation samples were collected (lab report attached) prior to cleanup efforts and sent to Hall Labs for analysis. Chemical Transportation Inc (CTI) initiated soil removal cleanup operations starting on 12/13/14. CTI scraped the top soil layers from one to six inches based on visual considerations using a soil excavator. Soil was taken to a centralized stockpiled location and placed on plastic sheeting with an earthen dike placed around soil. Soil which could not be safely removed with an excavator, was either removed via hand equipment or hydro -excavating equipment. The material removed was 657 cubic yards of diesel and hydrocarbon contaminated soil which was taken to Waste Managements Painted Desert Landfill near Joseph City AZ. After all excavation work was completed, confirmation samples were collected for the area of excavation and the soil pile using Hall Labs (lab report attached). Pictures of the cleanup area are attached.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Beck Larsen	Approved by Environmental Specialist:		
Title: Environmental Engineer	Approval Date:	Expiration Date:	
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 03-14-2014	Phone: (505) 722-0258		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Western Refining Southwest, Incorporated	Contact	Beck Larsen
Address	92 Giant Crossing Road Gallup NM 87301	Telephone No.	505-722-0217
Facility Name	Western Refining Southwest Gallup Refinery	Facility Type	Petroleum Refinery

Surface Owner	Mineral Owner	API No.
---------------	---------------	---------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Fire and hydrocarbon	Volume of Release	5 to 10 bbls	Volume Recovered	6-8 bbls
Source of Release	Flare	Date and Hour of Occurrence	12-10-2013 0625 hr	Date and Hour of Discovery	12-10-2013 0630 hr
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Carl Chavez Message Brandon Powell		
By Whom?	Ed Riege	Date and Hour	12-10-13 0725 hr		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*


Describe Cause of Problem and Remedial Action Taken.*

Freezing in units caused flare knockout drum to fill up, liquid hydrocarbon to ignited causing a flare fire and hydrocarbon (Diesel) to flow out top of flare. Onsite fire department put out fire.

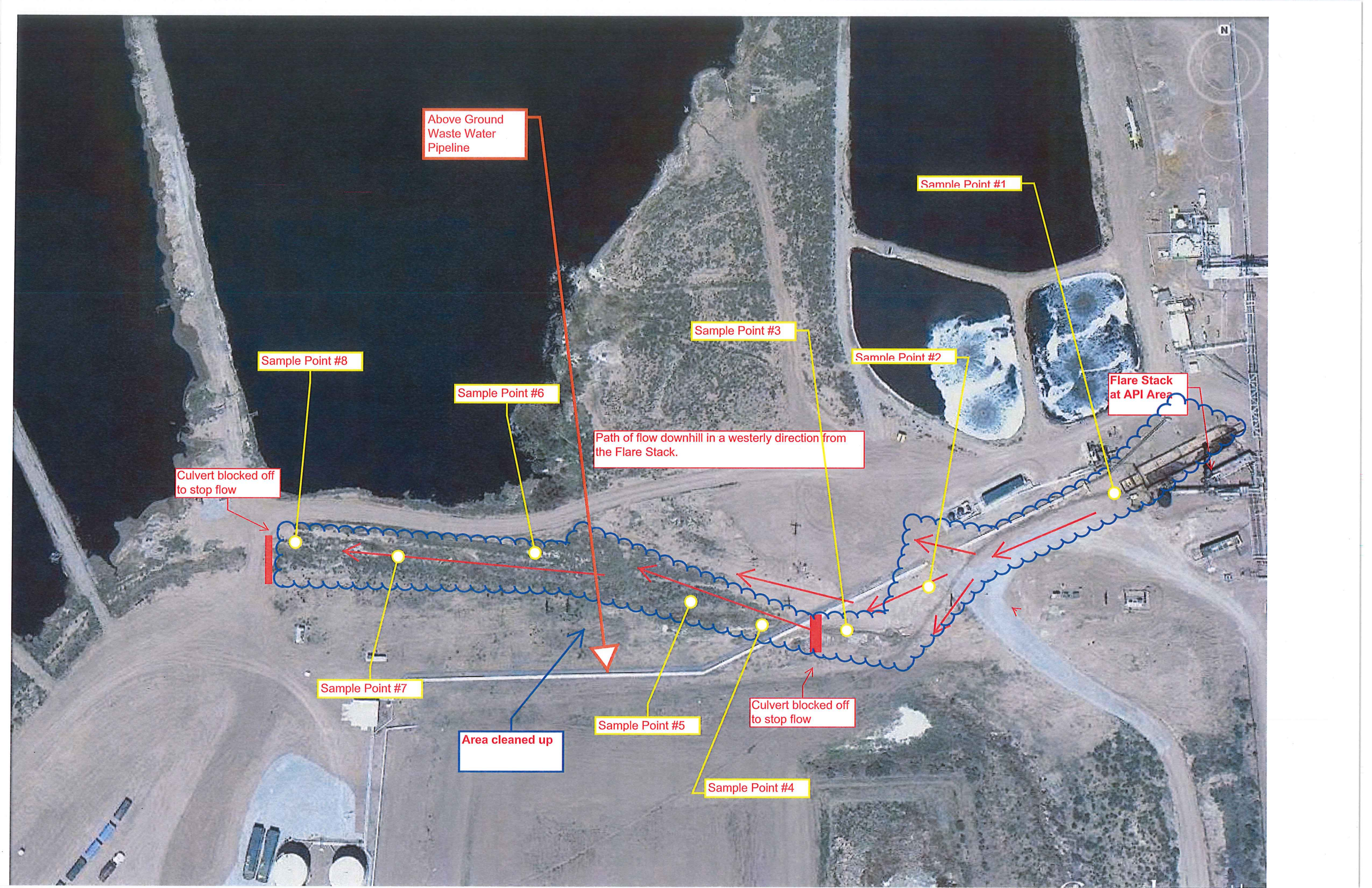
Describe Area Affected and Cleanup Action Taken.*

Area impacted around base of flare and diesel travelled with firewater to west for approximately 150 yards (refer to map). Absorbent was applied to hydrocarbon, ditch was plugged off and a vacuum truck removed visible hydrocarbon. Initial confirmations will be collected prior to any cleanup efforts and sent to an Outside Laboratory for analysis. Chemical Transportation Inc (CTI) will initiate cleanup operations. CTI will begin scraping the top soil layers from one to six inches based on visual considerations using a soil excavator. Soil will be brought to a centralized stockpiled location and placed on plastic sheeting. Soil which can not be safely removed with an excavator, will either be removed via hand equipment or a hydro -excavating equipment. Waste Characterization analysis. It is initially estimated that the material to be removed will be approximately 400 to 500 cubic yards. After all excavation work has been completed, confirmation samples will be collected for the area of excavation and the soil piles for disposal using an Outside Laboratory.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:				<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Beck Larsen				Approved by Environmental Specialist:	
Title: Environmental Engineer				Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com				Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12-23-2013	Phone: (505) 722-0258				

* Attach Additional Sheets If Necessary



Above Ground
Waste Water
Pipeline

Sample Point #1

Sample Point #3

Sample Point #2

Flare Stack
at API Area

Path of flow downhill in a westerly direction from
the Flare Stack.

Culvert blocked off
to stop flow

Sample Point #8

Sample Point #6

Sample Point #7

Area cleaned up

Sample Point #5

Culvert blocked off
to stop flow

Sample Point #4



1. Close up of spill on ground underneath pipeway near support beam. December 10, 2013.



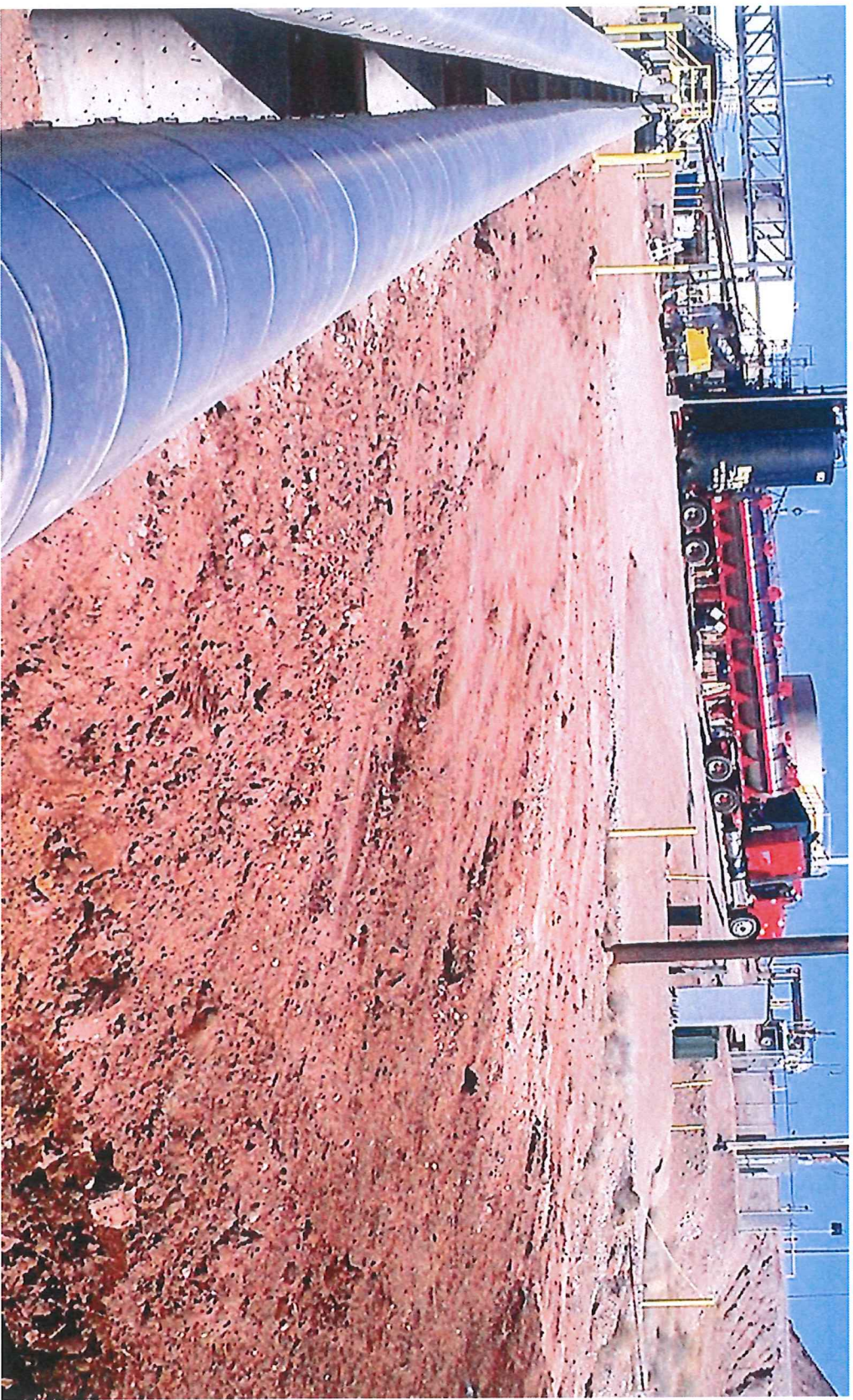
2. Close up of clean up under pipeway looking north. January 13, 2014.



3. Close of adsorbent used on spill.



4. Looking West from roadway – Cleanup in progress. January 14, 2014



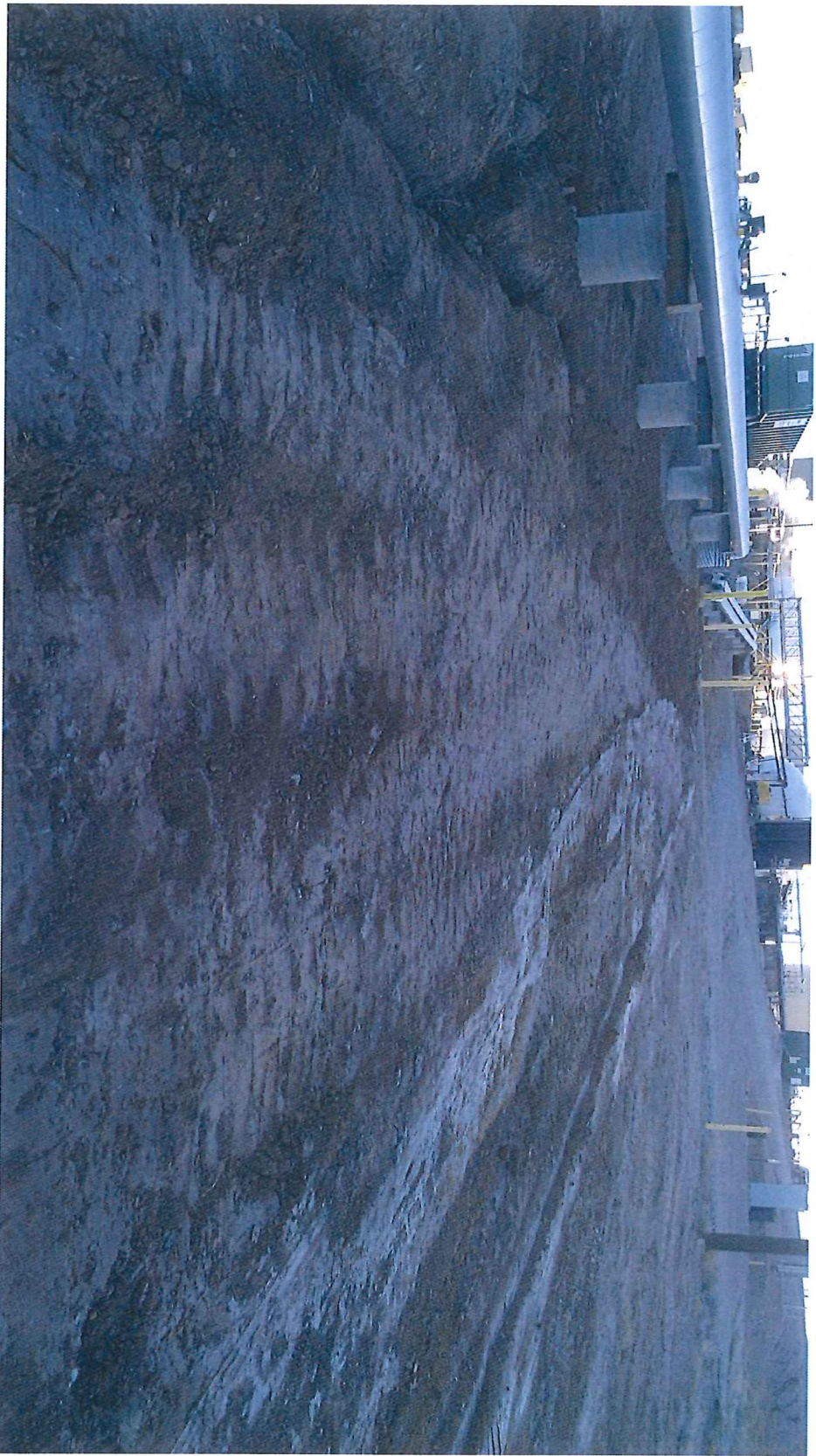
5. Clean up looking East – January 14, 2014



6. Looking North – After clean up, January 16, 2014



7. Looking West – After Clean up. January 15, 2014



8. Looking East – After Cleanup – January 16, 2014



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 24, 2014

Beck Larsen

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Flare Knockout Drum

OrderNo.: 1401757

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/17/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

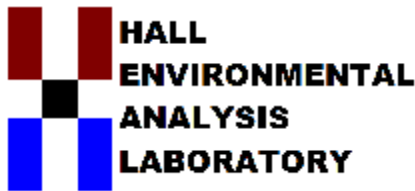
Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 31, 2014

Beck Larsen

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Flare Spill Dirt Pile

OrderNo.: 1401A22

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/24/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #1

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:30:00 PM

Lab ID: 1401A22-001

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	1100	99		mg/Kg	10	1/29/2014 8:32:36 PM	11403
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	1/29/2014 8:32:36 PM	11403
Surr: DNOP	0	66-131	S	%REC	10	1/29/2014 8:32:36 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	17	10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Surr: BFB	117	74.5-129		%REC	2	1/29/2014 1:45:28 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Toluene	ND	0.10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Ethylbenzene	ND	0.10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Xylenes, Total	0.43	0.20		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Surr: 4-Bromofluorobenzene	105	80-120		%REC	2	1/29/2014 1:45:28 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
1-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
2-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Acenaphthylene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Acenaphthene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Fluorene	ND	1.5		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Phenanthrene	ND	0.75		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Anthracene	ND	0.75		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Fluoranthene	ND	1.0		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Pyrene	ND	1.2		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benz(a)anthracene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Chrysene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(b)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(k)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(a)pyrene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Dibenz(a,h)anthracene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(g,h,i)perylene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Surr: Benzo(e)pyrene	0	40-138	S	%REC	5	1/29/2014 4:07:27 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:05:07 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:48:42 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #1

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:30:00 PM

Lab ID: 1401A22-001

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Ethylbenzene	0.050	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2,4-Trimethylbenzene	1.2	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Naphthalene	1.7	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1-Methylnaphthalene	2.8	2.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
2-Methylnaphthalene	6.4	2.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Bromobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Bromoform	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 3:40:30 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 3:40:30 PM	11412
2-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
4-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #1

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:30:00 PM

Lab ID: 1401A22-001

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Hexachlorobutadiene	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Isopropylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
4-Isopropyltoluene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 3:40:30 PM	11412
n-Butylbenzene	ND	1.5		mg/Kg	10	1/30/2014 3:10:25 AM	11412
n-Propylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
sec-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
tert-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Xylenes, Total	0.43	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Surr: Dibromofluoromethane	108	70-130		%REC	1	1/29/2014 3:40:30 PM	11412
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	1/29/2014 3:40:30 PM	11412
Surr: Toluene-d8	90.6	70-130		%REC	1	1/29/2014 3:40:30 PM	11412
Surr: 4-Bromofluorobenzene	80.2	70-130		%REC	10	1/30/2014 3:10:25 AM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #2

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:32:00 PM

Lab ID: 1401A22-002

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/29/2014 8:54:45 PM	11403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/29/2014 8:54:45 PM	11403
Surr: DNOP	101	66-131		%REC	1	1/29/2014 8:54:45 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Surr: BFB	95.4	74.5-129		%REC	1	1/29/2014 3:11:11 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	1/29/2014 3:11:11 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
1-Methylnaphthalene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
2-Methylnaphthalene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Acenaphthylene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Acenaphthene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Fluorene	ND	0.30		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Phenanthrene	ND	0.15		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Anthracene	ND	0.15		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Fluoranthene	ND	0.20		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Pyrene	ND	0.25		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benz(a)anthracene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Chrysene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(b)fluoranthene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(k)fluoranthene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(a)pyrene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Dibenz(a,h)anthracene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(g,h,i)perylene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Surr: Benzo(e)pyrene	124	40-138		%REC	1	1/29/2014 4:36:38 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:06:54 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:49:55 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #2

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:32:00 PM

Lab ID: 1401A22-002

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,4-Trimethylbenzene	0.12	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Naphthalene	0.16	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1-Methylnaphthalene	0.32	0.20		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Methylnaphthalene	0.67	0.20		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #2

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:32:00 PM

Lab ID: 1401A22-002

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Surr: Dibromofluoromethane	113	70-130		%REC	1	1/30/2014 12:06:58 PM	11412
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	1/30/2014 12:06:58 PM	11412
Surr: Toluene-d8	95.7	70-130		%REC	1	1/30/2014 12:06:58 PM	11412
Surr: 4-Bromofluorobenzene	85.0	70-130		%REC	1	1/30/2014 12:06:58 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #3

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:35:00 PM

Lab ID: 1401A22-003

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/31/2014 10:12:50 AM	11403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2014 10:12:50 AM	11403
Surr: DNOP	104	66-131		%REC	1	1/31/2014 10:12:50 AM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Surr: BFB	90.2	74.5-129		%REC	1	1/28/2014 6:39:38 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	1/28/2014 6:39:38 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
1-Methylnaphthalene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
2-Methylnaphthalene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Acenaphthylene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Acenaphthene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Fluorene	ND	0.15		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Phenanthrene	ND	0.075		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Anthracene	ND	0.075		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Fluoranthene	ND	0.10		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Pyrene	ND	0.12		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benz(a)anthracene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Chrysene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(b)fluoranthene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(k)fluoranthene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(a)pyrene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Dibenz(a,h)anthracene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(g,h,i)perylene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Surr: Benzo(e)pyrene	90.8	40-138		%REC	5	1/29/2014 5:05:57 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:08:39 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:54:59 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #3

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:35:00 PM

Lab ID: 1401A22-003

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #3

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:35:00 PM

Lab ID: 1401A22-003

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Surr: Dibromofluoromethane	108	70-130		%REC	1	1/29/2014 4:37:52 PM	11412
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	1/29/2014 4:37:52 PM	11412
Surr: Toluene-d8	98.6	70-130		%REC	1	1/29/2014 4:37:52 PM	11412
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1	1/29/2014 4:37:52 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #4

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:36:00 PM

Lab ID: 1401A22-004

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/29/2014 9:38:47 PM	11403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/29/2014 9:38:47 PM	11403
Surr: DNOP	103	66-131		%REC	1	1/29/2014 9:38:47 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Surr: BFB	91.5	74.5-129		%REC	1	1/28/2014 7:08:08 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	1/28/2014 7:08:08 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
1-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
2-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Acenaphthylene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Acenaphthene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Fluorene	ND	0.030		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Phenanthrene	ND	0.015		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Anthracene	ND	0.015		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Fluoranthene	ND	0.020		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Pyrene	ND	0.025		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benz(a)anthracene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Chrysene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(a)pyrene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Surr: Benzo(e)pyrene	99.3	40-138		%REC	1	1/29/2014 5:35:12 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:10:26 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:56:20 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #4

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:36:00 PM

Lab ID: 1401A22-004

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #4

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:36:00 PM

Lab ID: 1401A22-004

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Surr: Dibromofluoromethane	117	70-130		%REC	1	1/29/2014 5:06:37 PM	11412
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	1/29/2014 5:06:37 PM	11412
Surr: Toluene-d8	91.6	70-130		%REC	1	1/29/2014 5:06:37 PM	11412
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	1/29/2014 5:06:37 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #5

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:37:00 PM

Lab ID: 1401A22-005

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/29/2014 10:00:40 PM	11403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/29/2014 10:00:40 PM	11403
Surr: DNOP	102	66-131		%REC	1	1/29/2014 10:00:40 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Surr: BFB	91.2	74.5-129		%REC	1	1/28/2014 7:36:43 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	1/28/2014 7:36:43 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
1-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
2-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Acenaphthylene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Acenaphthene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Fluorene	ND	0.030		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Phenanthrene	ND	0.015		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Anthracene	ND	0.015		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Fluoranthene	ND	0.020		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Pyrene	ND	0.025		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benz(a)anthracene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Chrysene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(a)pyrene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Surr: Benzo(e)pyrene	93.8	40-138		%REC	1	1/29/2014 6:04:34 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:12:14 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:57:34 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #5

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:37:00 PM

Lab ID: 1401A22-005

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #5

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:37:00 PM

Lab ID: 1401A22-005

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Surr: Dibromofluoromethane	107	70-130		%REC	1	1/29/2014 5:35:27 PM	11412
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	1/29/2014 5:35:27 PM	11412
Surr: Toluene-d8	94.7	70-130		%REC	1	1/29/2014 5:35:27 PM	11412
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	1	1/29/2014 5:35:27 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #6

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:40:00 PM

Lab ID: 1401A22-006

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	160	10		mg/Kg	1	1/30/2014 3:09:19 PM	11403
Motor Oil Range Organics (MRO)	280	50		mg/Kg	1	1/30/2014 3:09:19 PM	11403
Surr: DNOP	112	66-131		%REC	1	1/30/2014 3:09:19 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Surr: BFB	93.3	74.5-129		%REC	1	1/28/2014 9:59:26 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	1/28/2014 9:59:26 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
1-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
2-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Acenaphthylene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Acenaphthene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Fluorene	ND	1.5		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Phenanthrene	ND	0.75		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Anthracene	ND	0.75		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Fluoranthene	ND	1.0		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Pyrene	ND	1.2		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benz(a)anthracene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Chrysene	1.5	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(b)fluoranthene	0.77	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(k)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(a)pyrene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Dibenz(a,h)anthracene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(g,h,i)perylene	1.9	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Indeno(1,2,3-cd)pyrene	2.2	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Surr: Benzo(e)pyrene	0	40-138	S	%REC	5	1/29/2014 6:33:47 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:14:03 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:58:51 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #6

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:40:00 PM

Lab ID: 1401A22-006

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #6

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:40:00 PM

Lab ID: 1401A22-006

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Surr: Dibromofluoromethane	104	70-130		%REC	1	1/29/2014 6:04:16 PM	11412
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	1/29/2014 6:04:16 PM	11412
Surr: Toluene-d8	95.5	70-130		%REC	1	1/29/2014 6:04:16 PM	11412
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	1/29/2014 6:04:16 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #7

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:43:00 PM

Lab ID: 1401A22-007

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	310	10		mg/Kg	1	1/30/2014 3:40:21 PM	11403
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	1/30/2014 3:40:21 PM	11403
Surr: DNOP	112	66-131		%REC	1	1/30/2014 3:40:21 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	60	10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Surr: BFB	202	74.5-129	S	%REC	2	1/29/2014 3:39:43 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Toluene	ND	0.10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Ethylbenzene	ND	0.10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Xylenes, Total	1.9	0.20		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Surr: 4-Bromofluorobenzene	114	80-120		%REC	2	1/29/2014 3:39:43 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
1-Methylnaphthalene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
2-Methylnaphthalene	18	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Acenaphthylene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Acenaphthene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Fluorene	ND	1.5		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Phenanthrene	ND	0.75		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Anthracene	ND	0.75		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Fluoranthene	ND	1.0		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Pyrene	ND	1.3		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benz(a)anthracene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Chrysene	0.53	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(b)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(k)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(a)pyrene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Dibenz(a,h)anthracene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(g,h,i)perylene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Surr: Benzo(e)pyrene	0	40-138	S	%REC	5	1/29/2014 7:03:08 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:19:30 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 7:00:05 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #7

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:43:00 PM

Lab ID: 1401A22-007

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2,4-Trimethylbenzene	2.6	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,3,5-Trimethylbenzene	0.80	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Naphthalene	1.4	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1-Methylnaphthalene	2.6	2.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
2-Methylnaphthalene	5.1	2.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Bromobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Bromoform	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 6:33:09 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 6:33:09 PM	11412
2-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
4-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #7

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:43:00 PM

Lab ID: 1401A22-007

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Hexachlorobutadiene	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Isopropylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
4-Isopropyltoluene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 6:33:09 PM	11412
n-Butylbenzene	ND	1.5		mg/Kg	10	1/30/2014 12:35:40 PM	11412
n-Propylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
sec-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
tert-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Xylenes, Total	1.9	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Surr: Dibromofluoromethane	114	70-130		%REC	1	1/29/2014 6:33:09 PM	11412
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	1/29/2014 6:33:09 PM	11412
Surr: Toluene-d8	97.5	70-130		%REC	1	1/29/2014 6:33:09 PM	11412
Surr: 4-Bromofluorobenzene	80.6	70-130		%REC	10	1/30/2014 12:35:40 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-001B 1

Collected By :
Collection Date : 01/21/14 12:30

ESC Sample # : L680130-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-01 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-002B 2

Collected By :
Collection Date : 01/21/14 12:32

ESC Sample # : L680130-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-02 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :
Sample ID : 1401A22-003B 3
Collected By :
Collection Date : 01/21/14 12:35

ESC Sample # : L680130-03

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-03 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

January 31, 2014

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-004B

Collected By :
Collection Date : 01/21/14 12:36

ESC Sample # : L680130-04

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40

L680130-04 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :
Sample ID : 1401A22-005B 5
Collected By :
Collection Date : 01/21/14 12:37

ESC Sample # : L680130-05

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-05 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-006B 6

Collected By :
Collection Date : 01/21/14 12:40

ESC Sample # : L680130-06

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-06 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :
Sample ID : 1401A22-007B 7
Collected By :
Collection Date : 01/21/14 12:43

ESC Sample # : L680130-07

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-07 (IGNITABILITY) - Did Not Ignite @ 170 F



YOUR LAB OF CHOICE

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L680130

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

January 31, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Reactive Sulf. (SW846 7.3.4.1)	< 25	mg/kg			WG703685	01/30/14 15:00
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG703688	01/30/14 20:35

Analyte	Units	Result	Duplicate		RPD	Limit	Ref Samp	Batch
			Duplicate	% Rec				
Corrosivity		0.0	0.0	0.0	0.0	10	L680117-01	WG703730
Corrosivity		0.0	0.0	0.0	0.0	10	L680130-07	WG703730
Ignitability	Deg. F	0.00	0.00	0.00	0.00	10	L680117-01	WG703902
Ignitability	Deg. F	0.00	0.00	0.00	0.00	10	L680130-07	WG703902
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	0.0	0.0	0.0	0.0	20	L680007-01	WG703685
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	0.0	0.0	0.0	0.0	20	L680142-09	WG703685
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0	0.0	0.0	0.0	20	L680007-01	WG703688
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0	0.0	0.0	0.0	20	L680142-09	WG703688

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Corrosivity		5.93	5.90	99.5	98.3-101.7	WG703730
Ignitability	Deg. F	82	83.0	101.	93-107	WG703902
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	100	110.	110.	70-130	WG703685

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	% Rec				
Corrosivity		5.90	5.90	99.0	98.3-101.7	0.0	10	WG703730
Ignitability	Deg. F	83.0	83.0	101.	93-107	0.00	20	WG703902
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	100.	110.	100.	70-130	9.52	20	WG703685

Batch number / Run number / Sample number cross reference

WG703730: R2880753: L680130-01 02 03 04 05 06 07
WG703902: R2880972: L680130-01 02 03 04 05 06 07
WG703685: R2881002: L680130-01 02 03 04 05 06 07
WG703688: R2881107: L680130-01 02 03 04 05 06 07

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11403	SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	11403		RunNo:	16359				
Prep Date:	1/27/2014	Analysis Date:	1/29/2014		SeqNo:	472322		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	66	131			

Sample ID	LCS-11403		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 11403		RunNo: 16359					
Prep Date:	1/27/2014		Analysis Date: 1/29/2014		SeqNo: 472323		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	60.8	145			
Surr: DNOP	5.3		5.000		105	66	131			

Sample ID	MB-11441		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 11441		RunNo: 16383					
Prep Date:	1/28/2014		Analysis Date: 1/30/2014		SeqNo: 473349		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.5		10.00		84.9	66	131			

Sample ID	LCS-11441		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 11441		RunNo: 16383					
Prep Date:	1/28/2014		Analysis Date: 1/30/2014		SeqNo: 473351		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		78.6	66	131			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11412		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 11412		RunNo: 16351					
Prep Date:	1/27/2014		Analysis Date: 1/28/2014		SeqNo: 471380		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.3	74.5	129			

Sample ID	LCS-11412		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 11412		RunNo: 16351					
Prep Date:	1/27/2014		Analysis Date: 1/28/2014		SeqNo: 471381		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	74.5	126			
Surr: BFB	940		1000		94.2	74.5	129			

Sample ID	MB-11450		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 11450		RunNo: 16363					
Prep Date:	1/28/2014		Analysis Date: 1/29/2014		SeqNo: 472127		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.5	74.5	129			

Sample ID	LCS-11450		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 11450		RunNo: 16363					
Prep Date:	1/28/2014		Analysis Date: 1/29/2014		SeqNo: 472128		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.0	74.5	129			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11412		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	11412		RunNo:	16351			
Prep Date:	1/27/2014		Analysis Date:	1/28/2014		SeqNo:	471415		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID	LCS-11412		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	11412		RunNo:	16351			
Prep Date:	1/27/2014		Analysis Date:	1/28/2014		SeqNo:	471416		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	108	80	120			
Xylenes, Total	3.2	0.10	3.000	0	108	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	MB-11450		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	11450		RunNo:	16363			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472159		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	LCS-11450		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	11450		RunNo:	16363			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472160		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	1401A22-001AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	#1		Batch ID:	11412		RunNo:	16363			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	472162		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.10	0.9970	0	93.6	67.4	135			
Toluene	1.0	0.10	0.9970	0.02666	98.4	72.6	135			
Ethylbenzene	1.0	0.10	0.9970	0.05631	97.8	69.4	143			
Xylenes, Total	3.4	0.20	2.991	0.4270	98.9	70.8	144			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	1401A22-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	#1	Batch ID:	11412	RunNo:	16363					
Prep Date:	1/27/2014	Analysis Date:	1/29/2014	SeqNo:	472162	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	2.2		1.994		109	80	120			

Sample ID	1401A22-001AMSD	SampType:	MSD	TestCode: EPA Method 8021B: Volatiles						
Client ID:	#1	Batch ID:	11412	RunNo: 16363						
Prep Date:	1/27/2014	Analysis Date:	1/29/2014	SeqNo: 472163		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.10	0.9980	0	105	67.4	135	11.4	20	
Toluene	1.1	0.10	0.9980	0.02666	106	72.6	135	7.04	20	
Ethylbenzene	1.1	0.10	0.9980	0.05631	107	69.4	143	8.81	20	
Xylenes, Total	3.6	0.20	2.994	0.4270	106	70.8	144	6.50	20	
Surr: 4-Bromofluorobenzene	2.1		1.996		106	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	mb-11450		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	PBS		Batch ID:	11450		RunNo:	16373			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472210		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.2	70	130			
Surr: Toluene-d8	0.42		0.5000		84.8	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.4	70	130			

Sample ID	lcs-11450		SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	LCSS		Batch ID:	11450		RunNo:	16373			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472212		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.57		0.5000		113	70	130			
Surr: 1,2-Dichloroethane-d4	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11419		SampType:	MBLK		TestCode:	EPA Method 8310: PAHs			
Client ID:	PBS		Batch ID:	11419		RunNo:	16327			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	471395		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Acenaphthylene	ND	0.25								
Acenaphthene	ND	0.25								
Fluorene	ND	0.030								
Phenanthrene	ND	0.015								
Anthracene	ND	0.015								
Fluoranthene	ND	0.020								
Pyrene	ND	0.025								
Benz(a)anthracene	ND	0.010								
Chrysene	ND	0.010								
Benzo(b)fluoranthene	ND	0.010								
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.40		0.5000		80.0	40	138			

Sample ID	LCS-11419		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	11419		RunNo:	16327			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	471396		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.1	0.25	2.000	0	54.6	43.1	105			
1-Methylnaphthalene	0.98	0.25	2.000	0	48.8	39	98.6			
2-Methylnaphthalene	0.91	0.25	2.000	0	45.4	33.5	99.5			
Acenaphthylene	1.3	0.25	2.000	0	62.6	46.8	109			
Acenaphthene	0.99	0.25	2.000	0	49.6	37.8	101			
Fluorene	0.11	0.030	0.2000	0	53.2	41.8	98.6			
Phenanthrene	0.059	0.015	0.1006	0	58.2	42.3	118			
Anthracene	0.060	0.015	0.1006	0	60.1	43.7	107			
Fluoranthene	0.14	0.020	0.2006	0	68.0	44.9	114			
Pyrene	0.14	0.025	0.2000	0	69.6	37	109			
Benz(a)anthracene	0.013	0.010	0.02000	0	62.5	42.2	121			
Chrysene	0.059	0.010	0.1006	0	58.9	43.4	104			
Benzo(b)fluoranthene	0.016	0.010	0.02500	0	63.0	46.3	128			
Benzo(k)fluoranthene	ND	0.010	0.01250	0	64.0	44.8	128			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	LCS-11419		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	11419		RunNo:	16327			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	471396		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(a)pyrene	ND	0.010	0.01250	0	62.0	38.3	117			
Dibenz(a,h)anthracene	0.016	0.010	0.02500	0	63.0	45.2	114			
Benzo(g,h,i)perylene	0.014	0.010	0.02500	0	58.0	39.5	121			
Indeno(1,2,3-cd)pyrene	0.034	0.010	0.05002	0	69.0	51.7	114			
Surr: Benzo(e)pyrene	0.38		0.5000		76.4	40	138			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11470		SampType: MBLK		TestCode: MERCURY, TCLP					
Client ID:	PBW		Batch ID: 11470		RunNo: 16400					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 473022		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.020								

Sample ID	LCS-11470		SampType: LCS		TestCode: MERCURY, TCLP					
Client ID:	LCSW		Batch ID: 11470		RunNo: 16400					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 473023		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	97.4	80	120			

Sample ID	1401A22-006AMS		SampType: MS		TestCode: MERCURY, TCLP					
Client ID:	#6		Batch ID: 11470		RunNo: 16400					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 473035		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	99.2	75	125			

Sample ID	1401A22-006AMSD			SampType:	MSD		TestCode:	MERCURY, TCLP			
Client ID:	#6			Batch ID:	11470		RunNo:	16400			
Prep Date:	1/29/2014			Analysis Date:	1/30/2014		SeqNo:	473036		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	97.7	75	125	0	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11467		SampType: MBLK		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW		Batch ID: 11467		RunNo: 16378					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 472331		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-11467			SampType:	LCS		TestCode:	EPA Method 6010B: TCLP Metals			
Client ID:	LCSW			Batch ID:	11467		RunNo:	16378			
Prep Date:	1/29/2014			Analysis Date:	1/30/2014		SeqNo:	472332		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	ND	5.0	0.5000	0	92.2	80	120				
Barium	ND	100	0.5000	0	86.0	80	120				
Cadmium	ND	1.0	0.5000	0	89.4	80	120				
Chromium	ND	5.0	0.5000	0	87.2	80	120				
Lead	ND	5.0	0.5000	0	84.6	80	120				
Selenium	ND	1.0	0.5000	0	87.0	80	120				
Silver	ND	5.0	0.1000	0	94.1	80	120				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1401A22

RcptNo: 1

Received by/date:

AT 01/24/14

Logged By:

Michelle Garcia

1/24/2014 4:15:00 PM

Michelle Garcia

Completed By:

Michelle Garcia

1/27/2014 4:58:47 PM

Michelle Garcia

Reviewed By:

mg/LM 01/27/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Sampler: CTI

On Ice ☒ Yes ☐ No

Sample Temperature: 10

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
1-21-14	12:30	Soil	#1	2x8oz	ice	1401A22
	12:32	Soil	#2	2x8oz		001
	12:35		#3	2x8oz		002
	12:36		#4	2x8oz		003
	12:37		#5	2x8oz		004
	12:40		#6	2x8oz		005
	12:43		#7	2x8oz		006
						007

Date: 1-24-14

Time: 16:15

Date:

Time:

Relinquished by:

Lucas Maerten

Relinquished by:

Received by:

1-24-14 16:15

Date

Time

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

Flare Spill Dirt pile

Project #:

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMBs (8021B)	<input checked="" type="checkbox"/>
BTEX + MTBE + TPH (Gas only)	<input checked="" type="checkbox"/>
TPH 8015B (GRO / DRO / MRO)	<input checked="" type="checkbox"/>
TPH (Method 418.1)	<input checked="" type="checkbox"/>
EDB (Method 504.1)	<input checked="" type="checkbox"/>
PAH (8310 or 8270SIMS)	<input checked="" type="checkbox"/>
RCRA 8 Metals	<input checked="" type="checkbox"/>
Anions (F)	<input checked="" type="checkbox"/>
8081 Pesticides / 8082 PCB's	<input checked="" type="checkbox"/>
8260B (VOA) TCLP	<input checked="" type="checkbox"/>
8270 (Semi-VOA) TCLP	<input checked="" type="checkbox"/>
TCLP Metals RCRA 8	<input checked="" type="checkbox"/>
BTU	<input checked="" type="checkbox"/>
Air Bubbles (Y or N)	<input checked="" type="checkbox"/>

per BL do not analyze TCLP 8260 only 8260 on 1/27/14

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 31, 2014

Beck Larsen

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Flare Spill Dirt Pile

OrderNo.: 1401A22

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/24/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #1

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:30:00 PM

Lab ID: 1401A22-001

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	1100	99		mg/Kg	10	1/29/2014 8:32:36 PM	11403
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	1/29/2014 8:32:36 PM	11403
Surr: DNOP	0	66-131	S	%REC	10	1/29/2014 8:32:36 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	17	10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Surr: BFB	117	74.5-129		%REC	2	1/29/2014 1:45:28 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Toluene	ND	0.10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Ethylbenzene	ND	0.10		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Xylenes, Total	0.43	0.20		mg/Kg	2	1/29/2014 1:45:28 PM	11412
Surr: 4-Bromofluorobenzene	105	80-120		%REC	2	1/29/2014 1:45:28 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
1-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
2-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Acenaphthylene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Acenaphthene	ND	12		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Fluorene	ND	1.5		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Phenanthrene	ND	0.75		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Anthracene	ND	0.75		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Fluoranthene	ND	1.0		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Pyrene	ND	1.2		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benz(a)anthracene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Chrysene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(b)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(k)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(a)pyrene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Dibenz(a,h)anthracene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Benzo(g,h,i)perylene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.50		mg/Kg	5	1/29/2014 4:07:27 AM	11419
Surr: Benzo(e)pyrene	0	40-138	S	%REC	5	1/29/2014 4:07:27 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:05:07 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:48:42 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #1

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:30:00 PM

Lab ID: 1401A22-001

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:48:42 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:48:42 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Ethylbenzene	0.050	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2,4-Trimethylbenzene	1.2	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Naphthalene	1.7	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1-Methylnaphthalene	2.8	2.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
2-Methylnaphthalene	6.4	2.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Bromobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Bromoform	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 3:40:30 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 3:40:30 PM	11412
2-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
4-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #1

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:30:00 PM

Lab ID: 1401A22-001

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Hexachlorobutadiene	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Isopropylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
4-Isopropyltoluene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 3:40:30 PM	11412
n-Butylbenzene	ND	1.5		mg/Kg	10	1/30/2014 3:10:25 AM	11412
n-Propylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
sec-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
tert-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 3:10:25 AM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	1/30/2014 3:10:25 AM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Xylenes, Total	0.43	0.10		mg/Kg	1	1/29/2014 3:40:30 PM	11412
Surr: Dibromofluoromethane	108	70-130		%REC	1	1/29/2014 3:40:30 PM	11412
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	1/29/2014 3:40:30 PM	11412
Surr: Toluene-d8	90.6	70-130		%REC	1	1/29/2014 3:40:30 PM	11412
Surr: 4-Bromofluorobenzene	80.2	70-130		%REC	10	1/30/2014 3:10:25 AM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #2

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:32:00 PM

Lab ID: 1401A22-002

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/29/2014 8:54:45 PM	11403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/29/2014 8:54:45 PM	11403
Surr: DNOP	101	66-131		%REC	1	1/29/2014 8:54:45 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Surr: BFB	95.4	74.5-129		%REC	1	1/29/2014 3:11:11 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 3:11:11 PM	11412
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	1/29/2014 3:11:11 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
1-Methylnaphthalene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
2-Methylnaphthalene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Acenaphthylene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Acenaphthene	ND	2.5		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Fluorene	ND	0.30		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Phenanthrene	ND	0.15		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Anthracene	ND	0.15		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Fluoranthene	ND	0.20		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Pyrene	ND	0.25		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benz(a)anthracene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Chrysene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(b)fluoranthene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(k)fluoranthene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(a)pyrene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Dibenz(a,h)anthracene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Benzo(g,h,i)perylene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	1/29/2014 4:36:38 AM	11419
Surr: Benzo(e)pyrene	124	40-138		%REC	1	1/29/2014 4:36:38 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:06:54 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:49:55 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #2

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:32:00 PM

Lab ID: 1401A22-002

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:49:55 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:49:55 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,4-Trimethylbenzene	0.12	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Naphthalene	0.16	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1-Methylnaphthalene	0.32	0.20		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Methylnaphthalene	0.67	0.20		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #2

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:32:00 PM

Lab ID: 1401A22-002

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/30/2014 12:06:58 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/30/2014 12:06:58 PM	11412
Surr: Dibromofluoromethane	113	70-130		%REC	1	1/30/2014 12:06:58 PM	11412
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	1/30/2014 12:06:58 PM	11412
Surr: Toluene-d8	95.7	70-130		%REC	1	1/30/2014 12:06:58 PM	11412
Surr: 4-Bromofluorobenzene	85.0	70-130		%REC	1	1/30/2014 12:06:58 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #3

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:35:00 PM

Lab ID: 1401A22-003

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/31/2014 10:12:50 AM	11403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2014 10:12:50 AM	11403
Surr: DNOP	104	66-131		%REC	1	1/31/2014 10:12:50 AM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Surr: BFB	90.2	74.5-129		%REC	1	1/28/2014 6:39:38 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 6:39:38 PM	11412
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	1/28/2014 6:39:38 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
1-Methylnaphthalene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
2-Methylnaphthalene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Acenaphthylene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Acenaphthene	ND	1.2		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Fluorene	ND	0.15		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Phenanthrene	ND	0.075		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Anthracene	ND	0.075		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Fluoranthene	ND	0.10		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Pyrene	ND	0.12		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benz(a)anthracene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Chrysene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(b)fluoranthene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(k)fluoranthene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(a)pyrene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Dibenz(a,h)anthracene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Benzo(g,h,i)perylene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.050		mg/Kg	5	1/29/2014 5:05:57 AM	11419
Surr: Benzo(e)pyrene	90.8	40-138		%REC	5	1/29/2014 5:05:57 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:08:39 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:54:59 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #3

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:35:00 PM

Lab ID: 1401A22-003

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:54:59 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:54:59 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #3

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:35:00 PM

Lab ID: 1401A22-003

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 4:37:52 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 4:37:52 PM	11412
Surr: Dibromofluoromethane	108	70-130		%REC	1	1/29/2014 4:37:52 PM	11412
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	1/29/2014 4:37:52 PM	11412
Surr: Toluene-d8	98.6	70-130		%REC	1	1/29/2014 4:37:52 PM	11412
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1	1/29/2014 4:37:52 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401A22**

Date Reported: **1/31/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #4

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:36:00 PM

Lab ID: 1401A22-004

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/29/2014 9:38:47 PM	11403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/29/2014 9:38:47 PM	11403
Surr: DNOP	103	66-131		%REC	1	1/29/2014 9:38:47 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Surr: BFB	91.5	74.5-129		%REC	1	1/28/2014 7:08:08 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 7:08:08 PM	11412
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	1/28/2014 7:08:08 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
1-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
2-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Acenaphthylene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Acenaphthene	ND	0.25		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Fluorene	ND	0.030		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Phenanthrene	ND	0.015		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Anthracene	ND	0.015		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Fluoranthene	ND	0.020		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Pyrene	ND	0.025		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benz(a)anthracene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Chrysene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(a)pyrene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.010		mg/Kg	1	1/29/2014 5:35:12 AM	11419
Surr: Benzo(e)pyrene	99.3	40-138		%REC	1	1/29/2014 5:35:12 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:10:26 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:56:20 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #4

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:36:00 PM

Lab ID: 1401A22-004

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:56:20 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:56:20 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #4

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:36:00 PM

Lab ID: 1401A22-004

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 5:06:37 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 5:06:37 PM	11412
Surr: Dibromofluoromethane	117	70-130		%REC	1	1/29/2014 5:06:37 PM	11412
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	1/29/2014 5:06:37 PM	11412
Surr: Toluene-d8	91.6	70-130		%REC	1	1/29/2014 5:06:37 PM	11412
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	1/29/2014 5:06:37 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #5

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:37:00 PM

Lab ID: 1401A22-005

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/29/2014 10:00:40 PM	11403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/29/2014 10:00:40 PM	11403
Surr: DNOP	102	66-131		%REC	1	1/29/2014 10:00:40 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Surr: BFB	91.2	74.5-129		%REC	1	1/28/2014 7:36:43 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 7:36:43 PM	11412
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	1/28/2014 7:36:43 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
1-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
2-Methylnaphthalene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Acenaphthylene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Acenaphthene	ND	0.25		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Fluorene	ND	0.030		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Phenanthrene	ND	0.015		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Anthracene	ND	0.015		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Fluoranthene	ND	0.020		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Pyrene	ND	0.025		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benz(a)anthracene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Chrysene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(a)pyrene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.010		mg/Kg	1	1/29/2014 6:04:34 AM	11419
Surr: Benzo(e)pyrene	93.8	40-138		%REC	1	1/29/2014 6:04:34 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:12:14 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:57:34 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #5

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:37:00 PM

Lab ID: 1401A22-005

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:57:34 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:57:34 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #5

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:37:00 PM

Lab ID: 1401A22-005

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 5:35:27 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 5:35:27 PM	11412
Surr: Dibromofluoromethane	107	70-130		%REC	1	1/29/2014 5:35:27 PM	11412
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	1/29/2014 5:35:27 PM	11412
Surr: Toluene-d8	94.7	70-130		%REC	1	1/29/2014 5:35:27 PM	11412
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	1	1/29/2014 5:35:27 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #6

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:40:00 PM

Lab ID: 1401A22-006

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	160	10		mg/Kg	1	1/30/2014 3:09:19 PM	11403
Motor Oil Range Organics (MRO)	280	50		mg/Kg	1	1/30/2014 3:09:19 PM	11403
Surr: DNOP	112	66-131		%REC	1	1/30/2014 3:09:19 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Surr: BFB	93.3	74.5-129		%REC	1	1/28/2014 9:59:26 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.050		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2014 9:59:26 PM	11412
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	1/28/2014 9:59:26 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
1-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
2-Methylnaphthalene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Acenaphthylene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Acenaphthene	ND	12		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Fluorene	ND	1.5		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Phenanthrene	ND	0.75		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Anthracene	ND	0.75		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Fluoranthene	ND	1.0		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Pyrene	ND	1.2		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benz(a)anthracene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Chrysene	1.5	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(b)fluoranthene	0.77	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(k)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(a)pyrene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Dibenz(a,h)anthracene	ND	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Benzo(g,h,i)perylene	1.9	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Indeno(1,2,3-cd)pyrene	2.2	0.50		mg/Kg	5	1/29/2014 6:33:47 AM	11419
Surr: Benzo(e)pyrene	0	40-138	S	%REC	5	1/29/2014 6:33:47 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:14:03 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 6:58:51 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #6

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:40:00 PM

Lab ID: 1401A22-006

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 6:58:51 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 6:58:51 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Naphthalene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromoform	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
4-Chlorotoluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #6

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:40:00 PM

Lab ID: 1401A22-006

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Hexachlorobutadiene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Isopropylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
4-Isopropyltoluene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
n-Butylbenzene	ND	0.15		mg/Kg	1	1/29/2014 6:04:16 PM	11412
n-Propylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
sec-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
tert-Butylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Xylenes, Total	ND	0.10		mg/Kg	1	1/29/2014 6:04:16 PM	11412
Surr: Dibromofluoromethane	104	70-130		%REC	1	1/29/2014 6:04:16 PM	11412
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	1/29/2014 6:04:16 PM	11412
Surr: Toluene-d8	95.5	70-130		%REC	1	1/29/2014 6:04:16 PM	11412
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	1/29/2014 6:04:16 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #7

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:43:00 PM

Lab ID: 1401A22-007

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	310	10		mg/Kg	1	1/30/2014 3:40:21 PM	11403
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	1/30/2014 3:40:21 PM	11403
Surr: DNOP	112	66-131		%REC	1	1/30/2014 3:40:21 PM	11403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	60	10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Surr: BFB	202	74.5-129	S	%REC	2	1/29/2014 3:39:43 PM	11412
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Toluene	ND	0.10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Ethylbenzene	ND	0.10		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Xylenes, Total	1.9	0.20		mg/Kg	2	1/29/2014 3:39:43 PM	11412
Surr: 4-Bromofluorobenzene	114	80-120		%REC	2	1/29/2014 3:39:43 PM	11412
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
1-Methylnaphthalene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
2-Methylnaphthalene	18	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Acenaphthylene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Acenaphthene	ND	13		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Fluorene	ND	1.5		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Phenanthrene	ND	0.75		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Anthracene	ND	0.75		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Fluoranthene	ND	1.0		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Pyrene	ND	1.3		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benz(a)anthracene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Chrysene	0.53	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(b)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(k)fluoranthene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(a)pyrene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Dibenz(a,h)anthracene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Benzo(g,h,i)perylene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Indeno(1,2,3-cd)pyrene	ND	0.50		mg/Kg	5	1/29/2014 7:03:08 AM	11419
Surr: Benzo(e)pyrene	0	40-138	S	%REC	5	1/29/2014 7:03:08 AM	11419
MERCURY, TCLP							Analyst: DBD
Mercury	ND	0.020		mg/L	1	1/30/2014 11:19:30 AM	11470
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Arsenic	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Barium	ND	100		mg/L	1	1/30/2014 7:00:05 AM	11467

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #7

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:43:00 PM

Lab ID: 1401A22-007

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: TCLP METALS							Analyst: ELS
Cadmium	ND	1.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Chromium	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Lead	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Selenium	ND	1.0		mg/L	1	1/30/2014 7:00:05 AM	11467
Silver	ND	5.0		mg/L	1	1/30/2014 7:00:05 AM	11467
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Toluene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Ethylbenzene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2,4-Trimethylbenzene	2.6	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,3,5-Trimethylbenzene	0.80	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Naphthalene	1.4	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1-Methylnaphthalene	2.6	2.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
2-Methylnaphthalene	5.1	2.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Acetone	ND	0.75		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Bromobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Bromodichloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Bromoform	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Bromomethane	ND	0.15		mg/Kg	1	1/29/2014 6:33:09 PM	11412
2-Butanone	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Carbon disulfide	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Carbon tetrachloride	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chlorobenzene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chloroethane	ND	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chloroform	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Chloromethane	ND	0.15		mg/Kg	1	1/29/2014 6:33:09 PM	11412
2-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
4-Chlorotoluene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
cis-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Dibromochloromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Dibromomethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401A22

Date Reported: 1/31/2014

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: #7

Project: Flare Spill Dirt Pile

Collection Date: 1/21/2014 12:43:00 PM

Lab ID: 1401A22-007

Matrix: SOIL

Received Date: 1/24/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1-Dichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1-Dichloroethene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,3-Dichloropropane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
2,2-Dichloropropane	ND	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1-Dichloropropene	ND	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Hexachlorobutadiene	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
2-Hexanone	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Isopropylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
4-Isopropyltoluene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Methylene chloride	ND	0.15		mg/Kg	1	1/29/2014 6:33:09 PM	11412
n-Butylbenzene	ND	1.5		mg/Kg	10	1/30/2014 12:35:40 PM	11412
n-Propylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
sec-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Styrene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
tert-Butylbenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
trans-1,2-DCE	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	1/30/2014 12:35:40 PM	11412
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Trichlorofluoromethane	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	1/30/2014 12:35:40 PM	11412
Vinyl chloride	ND	0.050		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Xylenes, Total	1.9	0.10		mg/Kg	1	1/29/2014 6:33:09 PM	11412
Surr: Dibromofluoromethane	114	70-130		%REC	1	1/29/2014 6:33:09 PM	11412
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	1/29/2014 6:33:09 PM	11412
Surr: Toluene-d8	97.5	70-130		%REC	1	1/29/2014 6:33:09 PM	11412
Surr: 4-Bromofluorobenzene	80.6	70-130		%REC	10	1/30/2014 12:35:40 PM	11412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-001B 1

Collected By :
Collection Date : 01/21/14 12:30

ESC Sample # : L680130-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-01 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-002B 2

Collected By :
Collection Date : 01/21/14 12:32

ESC Sample # : L680130-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-02 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :
Sample ID : 1401A22-003B 3
Collected By :
Collection Date : 01/21/14 12:35

ESC Sample # : L680130-03

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-03 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-004B

Collected By :
Collection Date : 01/21/14 12:36

ESC Sample # : L680130-04

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40

L680130-04 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :
Sample ID : 1401A22-005B 5
Collected By :
Collection Date : 01/21/14 12:37

ESC Sample # : L680130-05

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-05 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :

Sample ID : 1401A22-006B 6

Collected By :
Collection Date : 01/21/14 12:40

ESC Sample # : L680130-06

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-06 (IGNITABILITY) - Did Not Ignite @ 170 F



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 31, 2014

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : January 28, 2014
Description :
Sample ID : 1401A22-007B 7
Collected By :
Collection Date : 01/21/14 12:43

ESC Sample # : L680130-07

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	01/29/14	1
Ignitability	See Footnote		Deg. F	D93/1010A	01/30/14	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	01/30/14	1
Reactive Sulf. (SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	01/30/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/31/14 09:39 Printed: 01/31/14 09:40
L680130-07 (IGNITABILITY) - Did Not Ignite @ 170 F



YOUR LAB OF CHOICE

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L680130

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

January 31, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Reactive Sulf. (SW846 7.3.4.1)	< 25	mg/kg			WG703685	01/30/14 15:00
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG703688	01/30/14 20:35

Analyte	Units	Result	Duplicate		RPD	Limit	Ref Samp	Batch
			Duplicate	% Rec				
Corrosivity		0.0	0.0	0.0	0.0	10	L680117-01	WG703730
Corrosivity		0.0	0.0	0.0	0.0	10	L680130-07	WG703730
Ignitability	Deg. F	0.00	0.00	0.00	0.00	10	L680117-01	WG703902
Ignitability	Deg. F	0.00	0.00	0.00	0.00	10	L680130-07	WG703902
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	0.0	0.0	0.0	0.0	20	L680007-01	WG703685
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	0.0	0.0	0.0	0.0	20	L680142-09	WG703685
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0	0.0	0.0	0.0	20	L680007-01	WG703688
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0	0.0	0.0	0.0	20	L680142-09	WG703688

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Corrosivity		5.93	5.90	99.5	98.3-101.7	WG703730
Ignitability	Deg. F	82	83.0	101.	93-107	WG703902
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	100	110.	110.	70-130	WG703685

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	% Rec				
Corrosivity		5.90	5.90	99.0	98.3-101.7	0.0	10	WG703730
Ignitability	Deg. F	83.0	83.0	101.	93-107	0.00	20	WG703902
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	100.	110.	100.	70-130	9.52	20	WG703685

Batch number / Run number / Sample number cross reference

WG703730: R2880753: L680130-01 02 03 04 05 06 07
WG703902: R2880972: L680130-01 02 03 04 05 06 07
WG703685: R2881002: L680130-01 02 03 04 05 06 07
WG703688: R2881107: L680130-01 02 03 04 05 06 07

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11403	SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	11403		RunNo:	16359				
Prep Date:	1/27/2014	Analysis Date:	1/29/2014		SeqNo:	472322		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	66	131			

Sample ID	LCS-11403		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 11403		RunNo: 16359					
Prep Date:	1/27/2014		Analysis Date: 1/29/2014		SeqNo: 472323		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	60.8	145			
Surr: DNOP	5.3		5.000		105	66	131			

Sample ID	MB-11441		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 11441		RunNo: 16383					
Prep Date:	1/28/2014		Analysis Date: 1/30/2014		SeqNo: 473349		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.5		10.00		84.9	66	131			

Sample ID	LCS-11441		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 11441		RunNo: 16383					
Prep Date:	1/28/2014		Analysis Date: 1/30/2014		SeqNo: 473351		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		78.6	66	131			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11412		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 11412		RunNo: 16351					
Prep Date:	1/27/2014		Analysis Date: 1/28/2014		SeqNo: 471380		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.3	74.5	129			

Sample ID	LCS-11412		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 11412		RunNo: 16351					
Prep Date:	1/27/2014		Analysis Date: 1/28/2014		SeqNo: 471381		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	74.5	126			
Surr: BFB	940		1000		94.2	74.5	129			

Sample ID	MB-11450		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 11450		RunNo: 16363					
Prep Date:	1/28/2014		Analysis Date: 1/29/2014		SeqNo: 472127		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.5	74.5	129			

Sample ID	LCS-11450		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 11450		RunNo: 16363					
Prep Date:	1/28/2014		Analysis Date: 1/29/2014		SeqNo: 472128		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.0	74.5	129			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11412		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	11412		RunNo:	16351			
Prep Date:	1/27/2014		Analysis Date:	1/28/2014		SeqNo:	471415		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID	LCS-11412		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	11412		RunNo:	16351			
Prep Date:	1/27/2014		Analysis Date:	1/28/2014		SeqNo:	471416		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	108	80	120			
Xylenes, Total	3.2	0.10	3.000	0	108	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	MB-11450		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	11450		RunNo:	16363			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472159		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	LCS-11450		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	11450		RunNo:	16363			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472160		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	1401A22-001AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	#1		Batch ID:	11412		RunNo:	16363			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	472162		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.10	0.9970	0	93.6	67.4	135			
Toluene	1.0	0.10	0.9970	0.02666	98.4	72.6	135			
Ethylbenzene	1.0	0.10	0.9970	0.05631	97.8	69.4	143			
Xylenes, Total	3.4	0.20	2.991	0.4270	98.9	70.8	144			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	1401A22-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	#1	Batch ID:	11412	RunNo:	16363					
Prep Date:	1/27/2014	Analysis Date:	1/29/2014	SeqNo:	472162	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	2.2		1.994		109	80	120			

Sample ID	1401A22-001AMSD	SampType:	MSD	TestCode: EPA Method 8021B: Volatiles						
Client ID:	#1	Batch ID:	11412	RunNo: 16363						
Prep Date:	1/27/2014	Analysis Date:	1/29/2014	SeqNo: 472163		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.10	0.9980	0	105	67.4	135	11.4	20	
Toluene	1.1	0.10	0.9980	0.02666	106	72.6	135	7.04	20	
Ethylbenzene	1.1	0.10	0.9980	0.05631	107	69.4	143	8.81	20	
Xylenes, Total	3.6	0.20	2.994	0.4270	106	70.8	144	6.50	20	
Surr: 4-Bromofluorobenzene	2.1		1.996		106	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	mb-11450		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	PBS		Batch ID:	11450		RunNo:	16373			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472210		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.2	70	130			
Surr: Toluene-d8	0.42		0.5000		84.8	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.4	70	130			

Sample ID	lcs-11450		SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles			
Client ID:	LCSS		Batch ID:	11450		RunNo:	16373			
Prep Date:	1/28/2014		Analysis Date:	1/29/2014		SeqNo:	472212		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.57		0.5000		113	70	130			
Surr: 1,2-Dichloroethane-d4	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11419		SampType:	MBLK		TestCode:	EPA Method 8310: PAHs			
Client ID:	PBS		Batch ID:	11419		RunNo:	16327			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	471395		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Acenaphthylene	ND	0.25								
Acenaphthene	ND	0.25								
Fluorene	ND	0.030								
Phenanthrene	ND	0.015								
Anthracene	ND	0.015								
Fluoranthene	ND	0.020								
Pyrene	ND	0.025								
Benz(a)anthracene	ND	0.010								
Chrysene	ND	0.010								
Benzo(b)fluoranthene	ND	0.010								
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.40		0.5000		80.0	40	138			

Sample ID	LCS-11419		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	11419		RunNo:	16327			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	471396		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.1	0.25	2.000	0	54.6	43.1	105			
1-Methylnaphthalene	0.98	0.25	2.000	0	48.8	39	98.6			
2-Methylnaphthalene	0.91	0.25	2.000	0	45.4	33.5	99.5			
Acenaphthylene	1.3	0.25	2.000	0	62.6	46.8	109			
Acenaphthene	0.99	0.25	2.000	0	49.6	37.8	101			
Fluorene	0.11	0.030	0.2000	0	53.2	41.8	98.6			
Phenanthrene	0.059	0.015	0.1006	0	58.2	42.3	118			
Anthracene	0.060	0.015	0.1006	0	60.1	43.7	107			
Fluoranthene	0.14	0.020	0.2006	0	68.0	44.9	114			
Pyrene	0.14	0.025	0.2000	0	69.6	37	109			
Benz(a)anthracene	0.013	0.010	0.02000	0	62.5	42.2	121			
Chrysene	0.059	0.010	0.1006	0	58.9	43.4	104			
Benzo(b)fluoranthene	0.016	0.010	0.02500	0	63.0	46.3	128			
Benzo(k)fluoranthene	ND	0.010	0.01250	0	64.0	44.8	128			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	LCS-11419		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	11419		RunNo:	16327			
Prep Date:	1/27/2014		Analysis Date:	1/29/2014		SeqNo:	471396		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(a)pyrene	ND	0.010	0.01250	0	62.0	38.3	117			
Dibenz(a,h)anthracene	0.016	0.010	0.02500	0	63.0	45.2	114			
Benzo(g,h,i)perylene	0.014	0.010	0.02500	0	58.0	39.5	121			
Indeno(1,2,3-cd)pyrene	0.034	0.010	0.05002	0	69.0	51.7	114			
Surr: Benzo(e)pyrene	0.38		0.5000		76.4	40	138			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11470		SampType: MBLK		TestCode: MERCURY, TCLP					
Client ID:	PBW		Batch ID: 11470		RunNo: 16400					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 473022		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.020								

Sample ID	LCS-11470			SampType:	LCS		TestCode:	MERCURY, TCLP			
Client ID:	LCSW			Batch ID:	11470		RunNo:	16400			
Prep Date:	1/29/2014			Analysis Date:	1/30/2014		SeqNo:	473023		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	97.4	80	120				

Sample ID	1401A22-006AMS			SampType:	MS		TestCode:	MERCURY, TCLP			
Client ID:	#6			Batch ID:	11470		RunNo:	16400			
Prep Date:	1/29/2014			Analysis Date:	1/30/2014		SeqNo:	473035		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	99.2	75	125				

Sample ID	1401A22-006AMSD			SampType:	MSD		TestCode:	MERCURY, TCLP			
Client ID:	#6			Batch ID:	11470		RunNo:	16400			
Prep Date:	1/29/2014			Analysis Date:	1/30/2014		SeqNo:	473036		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercurv	ND	0.020	0.005000	0	97.7	75	125	0	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401A22

31-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Spill Dirt Pile

Sample ID	MB-11467		SampType: MBLK		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW		Batch ID: 11467		RunNo: 16378					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 472331		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-11467		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 11467		RunNo: 16378					
Prep Date:	1/29/2014		Analysis Date: 1/30/2014		SeqNo: 472332		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	92.2	80	120			
Barium	ND	100	0.5000	0	86.0	80	120			
Cadmium	ND	1.0	0.5000	0	89.4	80	120			
Chromium	ND	5.0	0.5000	0	87.2	80	120			
Lead	ND	5.0	0.5000	0	84.6	80	120			
Selenium	ND	1.0	0.5000	0	87.0	80	120			
Silver	ND	5.0	0.1000	0	94.1	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1401A22

RcptNo: 1

Received by/date:

AT 01/24/14

Logged By:

Michelle Garcia

1/24/2014 4:15:00 PM

Michelle Garcia

Completed By:

Michelle Garcia

1/27/2014 4:58:47 PM

Michelle Garcia

Reviewed By:

mg/LM 01/27/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Sampler: CTI

On Ice ☒ Yes ☐ No

Sample Temperature: 10

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
1-21-14	12:30	Soil	#1	2x8oz	ice	1401A22
	12:32	Soil	#2	2x8oz		001
	12:35		#3	2x8oz		002
	12:36		#4	2x8oz		003
	12:37		#5	2x8oz		004
	12:40		#6	2x8oz		005
	12:43		#7	2x8oz		006
						007

Date: 1-24-14

Time: 16:15

Date:

Time:

Relinquished by:

Lucas Maerten

Relinquished by:

Received by:

Chloe Kell 1/24/14

Received by:

Date

Time

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

Flare Spill Dirt pile

Project #:

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMBs (8021B)	<input checked="" type="checkbox"/>
BTEX + MTBE + TPH (Gas only)	<input checked="" type="checkbox"/>
TPH 8015B (GRO / DRO / MRO)	<input checked="" type="checkbox"/>
TPH (Method 418.1)	<input checked="" type="checkbox"/>
EDB (Method 504.1)	<input checked="" type="checkbox"/>
PAH (8310 or 8270SIMS)	<input checked="" type="checkbox"/>
RCRA 8 Metals	<input checked="" type="checkbox"/>
Anions (F)	<input checked="" type="checkbox"/>
8081 Pesticides / 8082 PCB's	<input checked="" type="checkbox"/>
8260B (VOA) TCLP	<input checked="" type="checkbox"/>
8270 (Semi-VOA) TCLP	<input checked="" type="checkbox"/>
TCLP Metals RCRA 8	<input checked="" type="checkbox"/>
BTU	<input checked="" type="checkbox"/>
Air Bubbles (Y or N)	<input checked="" type="checkbox"/>

per BL do not analyze TCLP 8260 only 8260 on 1/27/14

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #1

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:43:00 PM

Lab ID: 1401757-001

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:06:47 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:24:05 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 7:33:05 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 7:33:05 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 7:33:05 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 7:33:05 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 7:33:05 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 7:33:05 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 7:33:05 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 7:33:05 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 7:33:05 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
Surr: 2-Fluorophenol	53.3	18.6-88.6		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: Phenol-d5	45.2	19.5-61.8		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: 2,4,6-Tribromophenol	86.2	29.7-130		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: Nitrobenzene-d5	90.7	45.1-101		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: 2-Fluorobiphenyl	80.0	46.6-99.3		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: 4-Terphenyl-d14	74.1	40.8-109		%REC	1	1/22/2014 7:33:05 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
2-Butanone	ND	200		ppm	10	1/22/2014 1:39:23 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
Chlorobenzene	ND	100		ppm	10	1/22/2014 1:39:23 PM	11304
Chloroform	ND	6.0		ppm	10	1/22/2014 1:39:23 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/22/2014 1:39:23 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/22/2014 1:39:23 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #1

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:43:00 PM

Lab ID: 1401757-001

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/22/2014 1:39:23 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/22/2014 1:39:23 PM	11304
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
Surr: 4-Bromofluorobenzene	101	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
Surr: Dibromofluoromethane	104	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
Surr: Toluene-d8	97.3	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	680	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #2

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:53:00 PM

Lab ID: 1401757-002

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:08:37 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:25:16 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 3:12:24 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 3:12:24 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 3:12:24 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 3:12:24 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 3:12:24 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 3:12:24 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 3:12:24 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 3:12:24 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 3:12:24 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
Surr: 2-Fluorophenol	69.9	18.6-88.6		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: Phenol-d5	55.5	19.5-61.8		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: 2,4,6-Tribromophenol	89.9	29.7-130		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: Nitrobenzene-d5	101	45.1-101		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: 2-Fluorobiphenyl	89.5	46.6-99.3		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: 4-Terphenyl-d14	79.5	40.8-109		%REC	1	1/22/2014 3:12:24 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 7:20:45 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 7:20:45 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 7:20:45 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 7:20:45 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 7:20:45 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #2

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:53:00 PM

Lab ID: 1401757-002

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 7:20:45 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 7:20:45 PM	11304
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
Surr: Dibromofluoromethane	104	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
Surr: Toluene-d8	103	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #3

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:58:00 PM

Lab ID: 1401757-003

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:10:30 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:26:26 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 8:02:02 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 8:02:02 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 8:02:02 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 8:02:02 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 8:02:02 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 8:02:02 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 8:02:02 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 8:02:02 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 8:02:02 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
Surr: 2-Fluorophenol	49.8	18.6-88.6		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: Phenol-d5	41.2	19.5-61.8		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: 2,4,6-Tribromophenol	72.8	29.7-130		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: Nitrobenzene-d5	74.2	45.1-101		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: 2-Fluorobiphenyl	76.5	46.6-99.3		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: 4-Terphenyl-d14	63.9	40.8-109		%REC	1	1/22/2014 8:02:02 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 7:49:25 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 7:49:25 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 7:49:25 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 7:49:25 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 7:49:25 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #3

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:58:00 PM

Lab ID: 1401757-003

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS				Analyst: cadg			
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 7:49:25 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 7:49:25 PM	11304
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
Surr: Dibromofluoromethane	101	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
Surr: Toluene-d8	97.0	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
EPA METHOD 418.1: TPH				Analyst: BCN			
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #4

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:06:00 PM

Lab ID: 1401757-004

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:12:20 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:27:37 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 3:41:33 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 3:41:33 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 3:41:33 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 3:41:33 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 3:41:33 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 3:41:33 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 3:41:33 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 3:41:33 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 3:41:33 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
Surr: 2-Fluorophenol	50.1	18.6-88.6		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: Phenol-d5	42.7	19.5-61.8		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: 2,4,6-Tribromophenol	73.7	29.7-130		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: Nitrobenzene-d5	83.1	45.1-101		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: 2-Fluorobiphenyl	81.6	46.6-99.3		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: 4-Terphenyl-d14	70.8	40.8-109		%REC	1	1/22/2014 3:41:33 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 8:18:06 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 8:18:06 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 8:18:06 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 8:18:06 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 8:18:06 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #4

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:06:00 PM

Lab ID: 1401757-004

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 8:18:06 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 8:18:06 PM	11304
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
Surr: 4-Bromofluorobenzene	107	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
Surr: Dibromofluoromethane	101	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
Surr: Toluene-d8	98.2	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	23	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #5

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:13:00 PM

Lab ID: 1401757-005

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:14:11 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:28:53 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 8:30:43 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 8:30:43 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 8:30:43 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 8:30:43 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 8:30:43 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 8:30:43 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 8:30:43 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 8:30:43 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 8:30:43 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
Surr: 2-Fluorophenol	36.5	18.6-88.6		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: Phenol-d5	29.6	19.5-61.8		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: 2,4,6-Tribromophenol	54.4	29.7-130		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: Nitrobenzene-d5	54.0	45.1-101		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: 2-Fluorobiphenyl	51.1	46.6-99.3		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: 4-Terphenyl-d14	49.9	40.8-109		%REC	1	1/22/2014 8:30:43 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 8:46:53 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 8:46:53 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 8:46:53 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 8:46:53 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 8:46:53 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #5

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:13:00 PM

Lab ID: 1401757-005

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS				Analyst: cadg			
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 8:46:53 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 8:46:53 PM	11304
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
Surr: Dibromofluoromethane	102	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
Surr: Toluene-d8	101	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
EPA METHOD 418.1: TPH				Analyst: BCN			
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #6

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:18:00 PM

Lab ID: 1401757-006

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:15:55 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:30:03 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 4:10:16 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 4:10:16 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 4:10:16 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 4:10:16 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 4:10:16 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 4:10:16 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 4:10:16 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 4:10:16 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 4:10:16 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
Surr: 2-Fluorophenol	66.8	18.6-88.6		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: Phenol-d5	53.0	19.5-61.8		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: 2,4,6-Tribromophenol	87.3	29.7-130		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: Nitrobenzene-d5	87.5	45.1-101		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: 2-Fluorobiphenyl	85.4	46.6-99.3		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: 4-Terphenyl-d14	73.6	40.8-109		%REC	1	1/22/2014 4:10:16 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 9:15:42 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 9:15:42 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 9:15:42 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 9:15:42 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 9:15:42 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #6

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:18:00 PM

Lab ID: 1401757-006

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 9:15:42 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 9:15:42 PM	11304
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
Surr: Dibromofluoromethane	99.1	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
Surr: Toluene-d8	103	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #7

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:23:00 PM

Lab ID: 1401757-007

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:17:39 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:31:16 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 9:28:28 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 9:28:28 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 9:28:28 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 9:28:28 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 9:28:28 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 9:28:28 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 9:28:28 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 9:28:28 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 9:28:28 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
Surr: 2-Fluorophenol	51.4	18.6-88.6		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: Phenol-d5	41.3	19.5-61.8		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: 2,4,6-Tribromophenol	76.1	29.7-130		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: Nitrobenzene-d5	75.1	45.1-101		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: 2-Fluorobiphenyl	77.5	46.6-99.3		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: 4-Terphenyl-d14	67.0	40.8-109		%REC	1	1/22/2014 9:28:28 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 9:44:27 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 9:44:27 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 9:44:27 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 9:44:27 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 9:44:27 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #7

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:23:00 PM

Lab ID: 1401757-007

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 9:44:27 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 9:44:27 PM	11304
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
Surr: 4-Bromofluorobenzene	77.9	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
Surr: Dibromofluoromethane	100	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
Surr: Toluene-d8	99.4	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	1600	200		mg/Kg	10	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #8

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:27:00 PM

Lab ID: 1401757-008

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:19:24 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:32:27 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 4:39:09 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 4:39:09 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 4:39:09 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 4:39:09 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 4:39:09 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 4:39:09 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 4:39:09 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 4:39:09 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 4:39:09 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
Surr: 2-Fluorophenol	63.9	18.6-88.6		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: Phenol-d5	51.0	19.5-61.8		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: 2,4,6-Tribromophenol	81.3	29.7-130		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: Nitrobenzene-d5	90.1	45.1-101		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: 2-Fluorobiphenyl	87.5	46.6-99.3		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: 4-Terphenyl-d14	73.8	40.8-109		%REC	1	1/22/2014 4:39:09 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 11:39:23 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 11:39:23 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 11:39:23 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 11:39:23 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 11:39:23 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #8

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:27:00 PM

Lab ID: 1401757-008

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 11:39:23 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 11:39:23 PM	11304
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
Surr: Dibromofluoromethane	107	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
Surr: Toluene-d8	97.0	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-001	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-001B / FLARE KO DRUM LEAK #1			Sampling Time	1:43 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.42	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	39.4	mg/kg	12.3	1/22/2014	AJT	SW846 CH7	
Sulfur	624	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-002	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-002B / FLARE KO DRUM LEAK #2			Sampling Time	1:53 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.44	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.3	1/22/2014	AJT	SW846 CH7	
Sulfur	ND	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-003	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-003B / FLARE KO DRUM LEAK #3			Sampling Time	1:58 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.37	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.3	1/22/2014	AJT	SW846 CH7	
Sulfur	2510	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-004	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-004B / FLARE KO DRUM LEAK #4			Sampling Time	2:06 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.67	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	10.7	1/22/2014	AJT	SW846 CH7	
Sulfur	ND	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-005	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-005B / FLARE KO DRUM LEAK #5			Sampling Time	2:13 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.00	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	14.5	mg/kg	12.1	1/22/2014	AJT	SW846 CH7	
Sulfur	838	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-006	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-006B / FLARE KO DRUM LEAK #6			Sampling Time	2:18 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.20	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.5	1/22/2014	AJT	SW846 CH7	
Sulfur	956	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-007	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-007B / FLARE KO DRUM LEAK #7			Sampling Time	2:23 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	9.12	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	15.3	mg/kg	11	1/22/2014	AJT	SW846 CH7	
Sulfur	375	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number 140121034-008 **Sampling Date** 1/13/2014 **Date/Time Received** 1/21/2014 1:26 AM
Client Sample ID 1401757-008B / FLARE KO DRUM LEAK #8 **Sampling Time** 2:27 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	9.22	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.6	1/22/2014	AJT	SW846 CH7	
Sulfur	ND	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Authorized Signature


John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Thursday, January 23, 2014

Page 8 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	MB-11317		SampType: MBLK		TestCode: EPA Method 418.1: TPH					
Client ID:	PBS		Batch ID: 11317		RunNo: 16223					
Prep Date:	1/20/2014		Analysis Date: 1/22/2014		SeqNo: 467772		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-11317		SampType: LCS		TestCode: EPA Method 418.1: TPH					
Client ID:	LCSS		Batch ID: 11317		RunNo: 16223					
Prep Date:	1/20/2014		Analysis Date: 1/22/2014		SeqNo: 467773		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	80	120			

Sample ID	LCSD-11317		SampType: LCSD		TestCode: EPA Method 418.1: TPH					
Client ID:	LCSS02		Batch ID: 11317		RunNo: 16223					
Prep Date:	1/20/2014		Analysis Date: 1/22/2014		SeqNo: 467774		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	100	80	120	1.15	20	

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	lcs-11304		SampType: LCS		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	LCSS		Batch ID: 11304		RunNo: 16209					
Prep Date:	1/20/2014		Analysis Date: 1/21/2014		SeqNo: 467224		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0	90.7	70	130			
Chlorobenzene	0.88	0.10	1.000	0	87.9	70	130			
1,1-Dichloroethene	1.2	0.070	1.000	0	119	69.3	131			
Trichloroethene (TCE)	0.80	0.050	1.000	0	80.3	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.6	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.4	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID	1401757-001AMS		SampType: MS		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	Flare KO Drum Leak		Batch ID: 11304		RunNo: 16209					
Prep Date:	1/20/2014		Analysis Date: 1/21/2014		SeqNo: 467226		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.50	0.9980	0	108	65.1	127			
Chlorobenzene	0.97	0.50	0.9980	0	96.8	66.8	129			
1,1-Dichloroethene	1.0	0.70	0.9980	0	103	44.1	148			
Trichloroethene (TCE)	1.1	0.50	0.9980	0	109	63.2	122			
Surr: 1,2-Dichloroethane-d4	5.3		4.990		107	70	130			
Surr: 4-Bromofluorobenzene	5.2		4.990		103	70	130			
Surr: Dibromofluoromethane	5.7		4.990		114	70	130			
Surr: Toluene-d8	5.8		4.990		116	70	130			

Sample ID	1401757-001AMSD		SampType:	MSD		TestCode:	EPA Method 8260B: TCLP Compounds				
Client ID:	Flare KO Drum Leak		Batch ID:	11304		RunNo:	16209				
Prep Date:	1/20/2014		Analysis Date:	1/21/2014		SeqNo:	467227		Units:	ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.0	0.50	0.9990	0	103	65.1	127	4.11	20		
Chlorobenzene	0.99	0.50	0.9990	0	98.9	66.8	129	2.17	20		
1,1-Dichloroethene	1.1	0.70	0.9990	0	114	44.1	148	10.3	20		
Trichloroethene (TCE)	0.92	0.50	0.9990	0	92.1	63.2	122	16.8	20		
Surr: 1,2-Dichloroethane-d4	4.6		4.995		92.0	70	130	0	0		
Surr: 4-Bromofluorobenzene	4.9		4.995		98.1	70	130	0	0		
Surr: Dibromofluoromethane	5.1		4.995		103	70	130	0	0		
Surr: Toluene-d8	3.7		4.995		73.3	70	130	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	mb-11304		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	11304		RunNo:	16236			
Prep Date:	1/20/2014		Analysis Date:	1/22/2014		SeqNo:	468121		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.6	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		113	70	130			
Surr: Toluene-d8	0.43		0.5000		86.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	mb-11341		SampType:	MBLK		TestCode:	EPA Method 8270C TCLP			
Client ID:	PBS		Batch ID:	11341		RunNo:	16238			
Prep Date:	1/22/2014		Analysis Date:	1/22/2014		SeqNo:	468165		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.085		0.2000		42.6	18.6	88.6			
Surr: Phenol-d5	0.077		0.2000		38.3	19.5	61.8			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		58.5	29.7	130			
Surr: Nitrobenzene-d5	0.065		0.1000		65.1	45.1	101			
Surr: 2-Fluorobiphenyl	0.059		0.1000		58.5	46.6	99.3			
Surr: 4-Terphenyl-d14	0.057		0.1000		57.4	40.8	109			

Sample ID	lcs-11341		SampType:	LCS		TestCode:	EPA Method 8270C TCLP			
Client ID:	LCSS		Batch ID:	11341		RunNo:	16238			
Prep Date:	1/22/2014		Analysis Date:	1/22/2014		SeqNo:	468166		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.068	0.010	0.1000	0	67.7	31.5	114			
3+4-Methylphenol	0.16	0.010	0.2000	0	80.1	25.5	149			
2,4-Dinitrotoluene	0.061	0.010	0.1000	0	61.5	25.9	130			
Hexachlorobenzene	0.058	0.010	0.1000	0	57.7	40.7	93.9			
Hexachlorobutadiene	0.064	0.010	0.1000	0	63.6	25.2	96			
Hexachloroethane	0.063	0.010	0.1000	0	62.7	22.6	106			
Nitrobenzene	0.078	0.010	0.1000	0	78.1	37.8	125			
Pentachlorophenol	0.054	0.010	0.1000	0	53.8	10.8	91.7			
Pyridine	0.050	0.010	0.1000	0	50.2	9.61	88.8			
2,4,5-Trichlorophenol	0.074	0.010	0.1000	0	73.6	31.9	115			
2,4,6-Trichlorophenol	0.074	0.010	0.1000	0	74.1	29.7	113			
Cresols, Total	0.23	0.010	0.3000	0	75.9	30	136			
Surr: 2-Fluorophenol	0.11		0.2000		53.6	18.6	88.6			
Surr: Phenol-d5	0.088		0.2000		44.1	19.5	61.8			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	lcs-11341		SampType: LCS		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS		Batch ID: 11341		RunNo: 16238					
Prep Date:	1/22/2014		Analysis Date: 1/22/2014		SeqNo: 468166		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.17		0.2000		86.5	29.7	130			
Surr: Nitrobenzene-d5	0.086		0.1000		86.1	45.1	101			
Surr: 2-Fluorobiphenyl	0.070		0.1000		69.6	46.6	99.3			
Surr: 4-Terphenyl-d14	0.070		0.1000		70.4	40.8	109			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	MB-11362		SampType:	MBLK		TestCode:	MERCURY, TCLP				
Client ID:	PBW		Batch ID:	11362		RunNo:	16271				
Prep Date:	1/23/2014		Analysis Date:	1/24/2014		SeqNo:	469084		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020									

Sample ID	LCS-11362		SampType: LCS		TestCode: MERCURY, TCLP					
Client ID:	LCSW		Batch ID: 11362		RunNo: 16271					
Prep Date:	1/23/2014		Analysis Date: 1/24/2014		SeqNo: 469085		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	104	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	MB-11368		SampType: MBLK		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW		Batch ID: 11368		RunNo: 16283					
Prep Date:	1/23/2014		Analysis Date: 1/24/2014		SeqNo: 469445		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-11368		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 11368		RunNo: 16283					
Prep Date:	1/23/2014		Analysis Date: 1/24/2014		SeqNo: 469446		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	100	80	120			
Barium	ND	100	0.5000	0	92.6	80	120			
Cadmium	ND	1.0	0.5000	0	96.6	80	120			
Chromium	ND	5.0	0.5000	0	92.6	80	120			
Lead	ND	5.0	0.5000	0	92.8	80	120			
Selenium	ND	1.0	0.5000	0	92.8	80	120			
Silver	ND	5.0	0.1000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1401757

RcptNo: 1

Received by/date:

mg

01/17/14

Logged By: Michelle Garcia

1/17/2014 4:30:00 PM

Michelle Garcia

Completed By: Michelle Garcia

1/18/2014 11:38:58 AM

Michelle Garcia

Reviewed By:

mg

01/20/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 24, 2014

Beck Larsen

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Flare Knockout Drum

OrderNo.: 1401757

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/17/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #1

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:43:00 PM

Lab ID: 1401757-001

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:06:47 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:24:05 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:24:05 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:24:05 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 7:33:05 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 7:33:05 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 7:33:05 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 7:33:05 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 7:33:05 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 7:33:05 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 7:33:05 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 7:33:05 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 7:33:05 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 7:33:05 PM	11341
Surr: 2-Fluorophenol	53.3	18.6-88.6		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: Phenol-d5	45.2	19.5-61.8		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: 2,4,6-Tribromophenol	86.2	29.7-130		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: Nitrobenzene-d5	90.7	45.1-101		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: 2-Fluorobiphenyl	80.0	46.6-99.3		%REC	1	1/22/2014 7:33:05 PM	11341
Surr: 4-Terphenyl-d14	74.1	40.8-109		%REC	1	1/22/2014 7:33:05 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
2-Butanone	ND	200		ppm	10	1/22/2014 1:39:23 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
Chlorobenzene	ND	100		ppm	10	1/22/2014 1:39:23 PM	11304
Chloroform	ND	6.0		ppm	10	1/22/2014 1:39:23 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/22/2014 1:39:23 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/22/2014 1:39:23 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #1

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:43:00 PM

Lab ID: 1401757-001

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/22/2014 1:39:23 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/22/2014 1:39:23 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/22/2014 1:39:23 PM	11304
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
Surr: 4-Bromofluorobenzene	101	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
Surr: Dibromofluoromethane	104	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
Surr: Toluene-d8	97.3	70-130		%REC	10	1/22/2014 1:39:23 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	680	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #2

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:53:00 PM

Lab ID: 1401757-002

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:08:37 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:25:16 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:25:16 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:25:16 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 3:12:24 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 3:12:24 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 3:12:24 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 3:12:24 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 3:12:24 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 3:12:24 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 3:12:24 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 3:12:24 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 3:12:24 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 3:12:24 PM	11341
Surr: 2-Fluorophenol	69.9	18.6-88.6		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: Phenol-d5	55.5	19.5-61.8		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: 2,4,6-Tribromophenol	89.9	29.7-130		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: Nitrobenzene-d5	101	45.1-101		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: 2-Fluorobiphenyl	89.5	46.6-99.3		%REC	1	1/22/2014 3:12:24 PM	11341
Surr: 4-Terphenyl-d14	79.5	40.8-109		%REC	1	1/22/2014 3:12:24 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 7:20:45 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 7:20:45 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 7:20:45 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 7:20:45 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 7:20:45 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #2

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:53:00 PM

Lab ID: 1401757-002

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 7:20:45 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 7:20:45 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 7:20:45 PM	11304
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
Surr: Dibromofluoromethane	104	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
Surr: Toluene-d8	103	70-130		%REC	10	1/21/2014 7:20:45 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #3

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:58:00 PM

Lab ID: 1401757-003

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:10:30 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:26:26 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:26:26 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:26:26 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 8:02:02 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 8:02:02 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 8:02:02 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 8:02:02 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 8:02:02 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 8:02:02 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 8:02:02 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 8:02:02 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 8:02:02 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 8:02:02 PM	11341
Surr: 2-Fluorophenol	49.8	18.6-88.6		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: Phenol-d5	41.2	19.5-61.8		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: 2,4,6-Tribromophenol	72.8	29.7-130		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: Nitrobenzene-d5	74.2	45.1-101		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: 2-Fluorobiphenyl	76.5	46.6-99.3		%REC	1	1/22/2014 8:02:02 PM	11341
Surr: 4-Terphenyl-d14	63.9	40.8-109		%REC	1	1/22/2014 8:02:02 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 7:49:25 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 7:49:25 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 7:49:25 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 7:49:25 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 7:49:25 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #3

Project: Flare Knockout Drum

Collection Date: 1/13/2014 1:58:00 PM

Lab ID: 1401757-003

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 7:49:25 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 7:49:25 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 7:49:25 PM	11304
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
Surr: Dibromofluoromethane	101	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
Surr: Toluene-d8	97.0	70-130		%REC	10	1/21/2014 7:49:25 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #4

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:06:00 PM

Lab ID: 1401757-004

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:12:20 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:27:37 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:27:37 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:27:37 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 3:41:33 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 3:41:33 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 3:41:33 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 3:41:33 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 3:41:33 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 3:41:33 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 3:41:33 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 3:41:33 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 3:41:33 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 3:41:33 PM	11341
Surr: 2-Fluorophenol	50.1	18.6-88.6		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: Phenol-d5	42.7	19.5-61.8		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: 2,4,6-Tribromophenol	73.7	29.7-130		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: Nitrobenzene-d5	83.1	45.1-101		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: 2-Fluorobiphenyl	81.6	46.6-99.3		%REC	1	1/22/2014 3:41:33 PM	11341
Surr: 4-Terphenyl-d14	70.8	40.8-109		%REC	1	1/22/2014 3:41:33 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 8:18:06 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 8:18:06 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 8:18:06 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 8:18:06 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 8:18:06 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #4

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:06:00 PM

Lab ID: 1401757-004

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 8:18:06 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 8:18:06 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 8:18:06 PM	11304
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
Surr: 4-Bromofluorobenzene	107	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
Surr: Dibromofluoromethane	101	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
Surr: Toluene-d8	98.2	70-130		%REC	10	1/21/2014 8:18:06 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	23	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #5

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:13:00 PM

Lab ID: 1401757-005

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:14:11 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:28:53 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:28:53 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:28:53 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 8:30:43 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 8:30:43 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 8:30:43 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 8:30:43 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 8:30:43 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 8:30:43 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 8:30:43 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 8:30:43 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 8:30:43 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 8:30:43 PM	11341
Surr: 2-Fluorophenol	36.5	18.6-88.6		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: Phenol-d5	29.6	19.5-61.8		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: 2,4,6-Tribromophenol	54.4	29.7-130		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: Nitrobenzene-d5	54.0	45.1-101		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: 2-Fluorobiphenyl	51.1	46.6-99.3		%REC	1	1/22/2014 8:30:43 PM	11341
Surr: 4-Terphenyl-d14	49.9	40.8-109		%REC	1	1/22/2014 8:30:43 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 8:46:53 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 8:46:53 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 8:46:53 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 8:46:53 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 8:46:53 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #5

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:13:00 PM

Lab ID: 1401757-005

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 8:46:53 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 8:46:53 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 8:46:53 PM	11304
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
Surr: Dibromofluoromethane	102	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
Surr: Toluene-d8	101	70-130		%REC	10	1/21/2014 8:46:53 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #6

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:18:00 PM

Lab ID: 1401757-006

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:15:55 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:30:03 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:30:03 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:30:03 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 4:10:16 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 4:10:16 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 4:10:16 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 4:10:16 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 4:10:16 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 4:10:16 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 4:10:16 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 4:10:16 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 4:10:16 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 4:10:16 PM	11341
Surr: 2-Fluorophenol	66.8	18.6-88.6		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: Phenol-d5	53.0	19.5-61.8		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: 2,4,6-Tribromophenol	87.3	29.7-130		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: Nitrobenzene-d5	87.5	45.1-101		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: 2-Fluorobiphenyl	85.4	46.6-99.3		%REC	1	1/22/2014 4:10:16 PM	11341
Surr: 4-Terphenyl-d14	73.6	40.8-109		%REC	1	1/22/2014 4:10:16 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 9:15:42 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 9:15:42 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 9:15:42 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 9:15:42 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 9:15:42 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #6

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:18:00 PM

Lab ID: 1401757-006

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 9:15:42 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 9:15:42 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 9:15:42 PM	11304
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
Surr: Dibromofluoromethane	99.1	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
Surr: Toluene-d8	103	70-130		%REC	10	1/21/2014 9:15:42 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #7

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:23:00 PM

Lab ID: 1401757-007

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:17:39 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:31:16 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:31:16 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:31:16 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 9:28:28 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 9:28:28 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 9:28:28 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 9:28:28 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 9:28:28 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 9:28:28 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 9:28:28 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 9:28:28 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 9:28:28 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 9:28:28 PM	11341
Surr: 2-Fluorophenol	51.4	18.6-88.6		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: Phenol-d5	41.3	19.5-61.8		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: 2,4,6-Tribromophenol	76.1	29.7-130		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: Nitrobenzene-d5	75.1	45.1-101		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: 2-Fluorobiphenyl	77.5	46.6-99.3		%REC	1	1/22/2014 9:28:28 PM	11341
Surr: 4-Terphenyl-d14	67.0	40.8-109		%REC	1	1/22/2014 9:28:28 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 9:44:27 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 9:44:27 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 9:44:27 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 9:44:27 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 9:44:27 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #7

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:23:00 PM

Lab ID: 1401757-007

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 9:44:27 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 9:44:27 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 9:44:27 PM	11304
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
Surr: 4-Bromofluorobenzene	77.9	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
Surr: Dibromofluoromethane	100	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
Surr: Toluene-d8	99.4	70-130		%REC	10	1/21/2014 9:44:27 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	1600	200		mg/Kg	10	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #8

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:27:00 PM

Lab ID: 1401757-008

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP							Analyst: ELS
Mercury	ND	0.020		mg/L	1	1/24/2014 8:19:24 AM	11362
EPA METHOD 6010B: TCLP METALS							Analyst: JLF
Arsenic	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Barium	ND	100		mg/L	1	1/24/2014 12:32:27 PM	11368
Cadmium	ND	1.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Chromium	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Lead	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Selenium	ND	1.0		mg/L	1	1/24/2014 12:32:27 PM	11368
Silver	ND	5.0		mg/L	1	1/24/2014 12:32:27 PM	11368
EPA METHOD 8270C TCLP							Analyst: DAM
2-Methylphenol	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
3+4-Methylphenol	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
Phenol	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/22/2014 4:39:09 PM	11341
Hexachlorobenzene	ND	0.13		mg/L	1	1/22/2014 4:39:09 PM	11341
Hexachlorobutadiene	ND	0.50		mg/L	1	1/22/2014 4:39:09 PM	11341
Hexachloroethane	ND	3.0		mg/L	1	1/22/2014 4:39:09 PM	11341
Nitrobenzene	ND	2.0		mg/L	1	1/22/2014 4:39:09 PM	11341
Pentachlorophenol	ND	100		mg/L	1	1/22/2014 4:39:09 PM	11341
Pyridine	ND	5.0		mg/L	1	1/22/2014 4:39:09 PM	11341
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/22/2014 4:39:09 PM	11341
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/22/2014 4:39:09 PM	11341
Cresols, Total	ND	200		mg/L	1	1/22/2014 4:39:09 PM	11341
Surr: 2-Fluorophenol	63.9	18.6-88.6		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: Phenol-d5	51.0	19.5-61.8		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: 2,4,6-Tribromophenol	81.3	29.7-130		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: Nitrobenzene-d5	90.1	45.1-101		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: 2-Fluorobiphenyl	87.5	46.6-99.3		%REC	1	1/22/2014 4:39:09 PM	11341
Surr: 4-Terphenyl-d14	73.8	40.8-109		%REC	1	1/22/2014 4:39:09 PM	11341
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Benzene	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
2-Butanone	ND	200		ppm	10	1/21/2014 11:39:23 PM	11304
Carbon tetrachloride	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
Chlorobenzene	ND	100		ppm	10	1/21/2014 11:39:23 PM	11304
Chloroform	ND	6.0		ppm	10	1/21/2014 11:39:23 PM	11304
1,4-Dichlorobenzene	ND	7.5		ppm	10	1/21/2014 11:39:23 PM	11304
1,1-Dichloroethene	ND	0.70		ppm	10	1/21/2014 11:39:23 PM	11304

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401757**

Date Reported: **1/24/2014**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Flare KO Drum Leak #8

Project: Flare Knockout Drum

Collection Date: 1/13/2014 2:27:00 PM

Lab ID: 1401757-008

Matrix: SOLID

Received Date: 1/17/2014 4:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: TCLP COMPOUNDS							Analyst: cadg
Tetrachloroethene (PCE)	ND	0.70		ppm	10	1/21/2014 11:39:23 PM	11304
Trichloroethene (TCE)	ND	0.50		ppm	10	1/21/2014 11:39:23 PM	11304
Vinyl chloride	ND	0.20		ppm	10	1/21/2014 11:39:23 PM	11304
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
Surr: Dibromofluoromethane	107	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
Surr: Toluene-d8	97.0	70-130		%REC	10	1/21/2014 11:39:23 PM	11304
EPA METHOD 418.1: TPH							Analyst: BCN
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/22/2014	11317

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-001	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-001B / FLARE KO DRUM LEAK #1			Sampling Time	1:43 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.42	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	39.4	mg/kg	12.3	1/22/2014	AJT	SW846 CH7	
Sulfur	624	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-002	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-002B / FLARE KO DRUM LEAK #2			Sampling Time	1:53 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.44	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.3	1/22/2014	AJT	SW846 CH7	
Sulfur	ND	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-003	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-003B / FLARE KO DRUM LEAK #3			Sampling Time	1:58 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.37	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.3	1/22/2014	AJT	SW846 CH7	
Sulfur	2510	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-004	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-004B / FLARE KO DRUM LEAK #4			Sampling Time	2:06 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.67	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	10.7	1/22/2014	AJT	SW846 CH7	
Sulfur	ND	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-005	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-005B / FLARE KO DRUM LEAK #5			Sampling Time	2:13 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.00	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	14.5	mg/kg	12.1	1/22/2014	AJT	SW846 CH7	
Sulfur	838	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-006	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-006B / FLARE KO DRUM LEAK #6			Sampling Time	2:18 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	8.20	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.5	1/22/2014	AJT	SW846 CH7	
Sulfur	956	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number	140121034-007	Sampling Date	1/13/2014	Date/Time Received	1/21/2014 1:26 AM
Client Sample ID	1401757-007B / FLARE KO DRUM LEAK #7			Sampling Time	2:23 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	9.12	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	15.3	mg/kg	11	1/22/2014	AJT	SW846 CH7	
Sulfur	375	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 140121034
Project Name: 1401757

Analytical Results Report

Sample Number 140121034-008 **Sampling Date** 1/13/2014 **Date/Time Received** 1/21/2014 1:26 AM
Client Sample ID 1401757-008B / FLARE KO DRUM LEAK #8 **Sampling Time** 2:27 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	1	1/23/2014	CRW	SW846 CH7	
Ignitability	Negative			1/22/2014	JWC	EPA 1030	
pH	9.22	ph Units		1/22/2014	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	12.6	1/22/2014	AJT	SW846 CH7	
Sulfur	ND	mg/kg	300	1/22/2014	ALS	EPA 6010B	

Authorized Signature


John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Thursday, January 23, 2014

Page 8 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	MB-11317		SampType:	MBLK		TestCode:	EPA Method 418.1: TPH				
Client ID:	PBS		Batch ID:	11317		RunNo:	16223				
Prep Date:	1/20/2014		Analysis Date:	1/22/2014		SeqNo:	467772		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Petroleum Hydrocarbons, TR	ND	20									

Sample ID	LCS-11317		SampType: LCS		TestCode: EPA Method 418.1: TPH					
Client ID:	LCSS		Batch ID: 11317		RunNo: 16223					
Prep Date:	1/20/2014		Analysis Date: 1/22/2014		SeqNo: 467773		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	80	120			

Sample ID	LCSD-11317		SampType: LCSD		TestCode: EPA Method 418.1: TPH					
Client ID:	LCSS02		Batch ID: 11317		RunNo: 16223					
Prep Date:	1/20/2014		Analysis Date: 1/22/2014		SeqNo: 467774		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	100	80	120	1.15	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	lcs-11304		SampType: LCS		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	LCSS		Batch ID: 11304		RunNo: 16209					
Prep Date:	1/20/2014		Analysis Date: 1/21/2014		SeqNo: 467224		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0	90.7	70	130			
Chlorobenzene	0.88	0.10	1.000	0	87.9	70	130			
1,1-Dichloroethene	1.2	0.070	1.000	0	119	69.3	131			
Trichloroethene (TCE)	0.80	0.050	1.000	0	80.3	70	130			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.6	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.4	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID	1401757-001AMS		SampType: MS		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	Flare KO Drum Leak		Batch ID: 11304		RunNo: 16209					
Prep Date:	1/20/2014		Analysis Date: 1/21/2014		SeqNo: 467226		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.50	0.9980	0	108	65.1	127			
Chlorobenzene	0.97	0.50	0.9980	0	96.8	66.8	129			
1,1-Dichloroethene	1.0	0.70	0.9980	0	103	44.1	148			
Trichloroethene (TCE)	1.1	0.50	0.9980	0	109	63.2	122			
Surr: 1,2-Dichloroethane-d4	5.3		4.990		107	70	130			
Surr: 4-Bromofluorobenzene	5.2		4.990		103	70	130			
Surr: Dibromofluoromethane	5.7		4.990		114	70	130			
Surr: Toluene-d8	5.8		4.990		116	70	130			

Sample ID	1401757-001AMSD		SampType: MSD		TestCode: EPA Method 8260B: TCLP Compounds					
Client ID:	Flare KO Drum Leak		Batch ID: 11304		RunNo: 16209					
Prep Date:	1/20/2014		Analysis Date: 1/21/2014		SeqNo: 467227		Units: ppm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.50	0.9990	0	103	65.1	127	4.11	20	
Chlorobenzene	0.99	0.50	0.9990	0	98.9	66.8	129	2.17	20	
1,1-Dichloroethene	1.1	0.70	0.9990	0	114	44.1	148	10.3	20	
Trichloroethene (TCE)	0.92	0.50	0.9990	0	92.1	63.2	122	16.8	20	
Surr: 1,2-Dichloroethane-d4	4.6		4.995		92.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	4.9		4.995		98.1	70	130	0	0	
Surr: Dibromofluoromethane	5.1		4.995		103	70	130	0	0	
Surr: Toluene-d8	3.7		4.995		73.3	70	130	0	0	

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	mb-11304		SampType:	MBLK		TestCode:	EPA Method 8260B: TCLP Compounds			
Client ID:	PBS		Batch ID:	11304		RunNo:	16236			
Prep Date:	1/20/2014		Analysis Date:	1/22/2014		SeqNo:	468121		Units: ppm	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
2-Butanone	ND	20								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	10								
Chloroform	ND	0.60								
1,4-Dichlorobenzene	ND	0.75								
1,1-Dichloroethene	ND	0.070								
Tetrachloroethene (PCE)	ND	0.070								
Trichloroethene (TCE)	ND	0.050								
Vinyl chloride	ND	0.020								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.6	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		113	70	130			
Surr: Toluene-d8	0.43		0.5000		86.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	mb-11341		SampType:	MBLK		TestCode:	EPA Method 8270C TCLP			
Client ID:	PBS		Batch ID:	11341		RunNo:	16238			
Prep Date:	1/22/2014		Analysis Date:	1/22/2014		SeqNo:	468165		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
Surr: 2-Fluorophenol	0.085		0.2000		42.6	18.6	88.6			
Surr: Phenol-d5	0.077		0.2000		38.3	19.5	61.8			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		58.5	29.7	130			
Surr: Nitrobenzene-d5	0.065		0.1000		65.1	45.1	101			
Surr: 2-Fluorobiphenyl	0.059		0.1000		58.5	46.6	99.3			
Surr: 4-Terphenyl-d14	0.057		0.1000		57.4	40.8	109			

Sample ID	lcs-11341		SampType:	LCS		TestCode:	EPA Method 8270C TCLP			
Client ID:	LCSS		Batch ID:	11341		RunNo:	16238			
Prep Date:	1/22/2014		Analysis Date:	1/22/2014		SeqNo:	468166		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.068	0.010	0.1000	0	67.7	31.5	114			
3+4-Methylphenol	0.16	0.010	0.2000	0	80.1	25.5	149			
2,4-Dinitrotoluene	0.061	0.010	0.1000	0	61.5	25.9	130			
Hexachlorobenzene	0.058	0.010	0.1000	0	57.7	40.7	93.9			
Hexachlorobutadiene	0.064	0.010	0.1000	0	63.6	25.2	96			
Hexachloroethane	0.063	0.010	0.1000	0	62.7	22.6	106			
Nitrobenzene	0.078	0.010	0.1000	0	78.1	37.8	125			
Pentachlorophenol	0.054	0.010	0.1000	0	53.8	10.8	91.7			
Pyridine	0.050	0.010	0.1000	0	50.2	9.61	88.8			
2,4,5-Trichlorophenol	0.074	0.010	0.1000	0	73.6	31.9	115			
2,4,6-Trichlorophenol	0.074	0.010	0.1000	0	74.1	29.7	113			
Cresols, Total	0.23	0.010	0.3000	0	75.9	30	136			
Surr: 2-Fluorophenol	0.11		0.2000		53.6	18.6	88.6			
Surr: Phenol-d5	0.088		0.2000		44.1	19.5	61.8			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	lcs-11341		SampType: LCS		TestCode: EPA Method 8270C TCLP					
Client ID:	LCSS		Batch ID: 11341		RunNo: 16238					
Prep Date:	1/22/2014		Analysis Date: 1/22/2014		SeqNo: 468166		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	0.17		0.2000		86.5	29.7	130			
Surr: Nitrobenzene-d5	0.086		0.1000		86.1	45.1	101			
Surr: 2-Fluorobiphenyl	0.070		0.1000		69.6	46.6	99.3			
Surr: 4-Terphenyl-d14	0.070		0.1000		70.4	40.8	109			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	MB-11362		SampType:	MBLK		TestCode:	MERCURY, TCLP				
Client ID:	PBW		Batch ID:	11362		RunNo:	16271				
Prep Date:	1/23/2014		Analysis Date:	1/24/2014		SeqNo:	469084		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020									

Sample ID	LCS-11362			SampType:	LCS		TestCode:	MERCURY, TCLP			
Client ID:	LCSW			Batch ID:	11362		RunNo:	16271			
Prep Date:	1/23/2014			Analysis Date:	1/24/2014		SeqNo:	469085		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.020	0.005000	0	104	80	120				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401757

27-Jan-14

Client: Western Refining Southwest, Gallup

Project: Flare Knockout Drum

Sample ID	MB-11368		SampType: MBLK		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	PBW		Batch ID: 11368		RunNo: 16283					
Prep Date:	1/23/2014		Analysis Date: 1/24/2014		SeqNo: 469445		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID	LCS-11368		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 11368		RunNo: 16283					
Prep Date:	1/23/2014		Analysis Date: 1/24/2014		SeqNo: 469446		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	100	80	120			
Barium	ND	100	0.5000	0	92.6	80	120			
Cadmium	ND	1.0	0.5000	0	96.6	80	120			
Chromium	ND	5.0	0.5000	0	92.6	80	120			
Lead	ND	5.0	0.5000	0	92.8	80	120			
Selenium	ND	1.0	0.5000	0	92.8	80	120			
Silver	ND	5.0	0.1000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1401757

RcptNo: 1

Received by/date:

mg

01/17/14

Logged By: Michelle Garcia

1/17/2014 4:30:00 PM

Michelle Garcia

Completed By: Michelle Garcia

1/18/2014 11:38:58 AM

Michelle Garcia

Reviewed By:

mg

01/20/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present			

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, February 07, 2014 4:25 PM
To: 'Riege, Ed'; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch
Subject: RE: Evaporation Pond Chlorides
Attachments: C-141 EP Seeps 2-7-2014.pdf

Ed:

The answer to your question in Western's October 14, 2013 letter (see attachment) is "Yes".

Please proceed. Sorry for the late response.

Thank you.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division, Environmental Bureau

1220 South St. Francis Drive, Santa Fe, New Mexico 87505

O: (505) 476-3490

E-mail: CarlJ.Chavez@State.NM.US

Web: <http://www.emnrd.state.nm.us/ocd/>

“Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?” To see how, please go to: “Pollution Prevention & Waste Minimization” at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

-----Original Message-----

From: Riege, Ed [<mailto:Ed.Riege@wnr.com>]

Sent: Monday, October 14, 2013 8:18 AM

To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD

Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch

Subject: Evaporation Pond Chlorides

Carl,

Please see attached letter regarding chlorides from evaporation pond seepage. Signed hard copy is in the mail.

Thanks,

Ed

Ed Riege MPH

Environmental Manager

Western Refining

Gallup Refinery

Route 3 Box 7

Gallup, NM 87301

(505) 722-0217

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Monday, October 14, 2013 8:18 AM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Cc: Johnson, Cheryl; Hains, Allen; Scott T. Crouch
Subject: Evaporation Pond Chlorides
Attachments: perimeter soil samples - Rpt_1307A80_Final_v1.pdf; DRAFT - Chloride Concentration Map.pdf; 201310140811.pdf

Carl,
Please see attached letter regarding chlorides from evaporation pond seepage. Signed hard copy is in the mail.
Thanks,
Ed

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

Certified Mail #7011 2970 0003 9281 8404

October 14, 2013

Mr. Carl Chavez
Oil Conservation Division
Environmental Bureau
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Re: Remediation Standards for Chlorides From Pond Dike Seepage

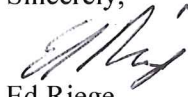
Dear Mr. Chavez:

Western submitted a C-141 Form on July 18, 2013 in response to the potential release of chemical constituents from some of the evaporation ponds during a time period when high pond levels caused seepage along the pond perimeter dikes. As noted in the C-141 Form, soil samples collected from around the perimeter of the ponds were to be analyzed for semi-volatile organics and chloride. As shown in the attached laboratory report, all analyses for semi-volatile organics were non-detect. The analyses for chloride indicate chloride concentrations in excess of the concentrations detected in the three background soil samples. The attached draft map shows the chloride concentrations around the ponds and in the three background samples.

We reviewed the OCD rules (Parts 1 through 39 of Title 19, Chapter 15) to identify appropriate remediation standards for chlorides in soils and noted that the new "pit" rules in 19.15.17.13 do provide specific remediation standards for chloride. The values in Table 1, which apply to situations where the pit contents are removed, appear to be appropriate remediation standards for the chloride we have identified in soils near some of the evaporation ponds. Before proceeding further with any additional sampling and/or remediation, I would like to get confirmation that the remediation standards for chloride in Table 1 of 19.15.17.13 are acceptable standards to guide our actions.

Please contact me at (505) 722-0217 if you have any or questions regarding this submittal.

Sincerely,



Ed Riege
Environmental Manager

C: Glen VonGonten - email
Kristen Van Horn- email





Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

August 06, 2013

Cheryl Johnson

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL: (505) 722-0231

FAX (505) 722-0210

RE: MSGP INSPECTION REPORT

OrderNo.: 1307A80

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 7/24/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:02:00 AM

Lab ID: 1307A80-001

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	4300	300		mg/Kg	200	7/30/2013 8:03:56 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:02:00 AM

Lab ID: 1307A80-001

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 9:37:41 AM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 9:37:41 AM	8568
Surr: 2,4,6-Tribromophenol	41.0	36.5-113		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 2-Fluorobiphenyl	94.2	43.3-111		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 2-Fluorophenol	88.2	32.2-118		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: 4-Terphenyl-d14	78.0	29.7-111		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: Nitrobenzene-d5	91.6	36.6-132		%REC	1	7/30/2013 9:37:41 AM	8568
Surr: Phenol-d5	91.4	28.5-128		%REC	1	7/30/2013 9:37:41 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:17:00 AM

Lab ID: 1307A80-002

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 8:16:20 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Aniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Carbazole	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Chrysene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:17:00 AM

Lab ID: 1307A80-002

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Fluorene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Isophorone	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Phenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pyrene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Pyridine	ND	0.49		mg/Kg	1	7/30/2013 12:46:46 AM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 12:46:46 AM	8568
Surr: 2,4,6-Tribromophenol	43.9	36.5-113		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 2-Fluorobiphenyl	78.1	43.3-111		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 2-Fluorophenol	71.8	32.2-118		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: 4-Terphenyl-d14	71.3	29.7-111		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: Nitrobenzene-d5	69.0	36.6-132		%REC	1	7/30/2013 12:46:46 AM	8568
Surr: Phenol-d5	69.0	28.5-128		%REC	1	7/30/2013 12:46:46 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:30:00 AM

Lab ID: 1307A80-003

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	8800	750		mg/Kg	500	7/30/2013 8:28:45 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:30:00 AM

Lab ID: 1307A80-003

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Isophorone	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Pyridine	ND	0.49		mg/Kg	1	7/29/2013 8:27:52 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:27:52 PM	8568
Surr: 2,4,6-Tribromophenol	42.3	36.5-113		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 2-Fluorobiphenyl	59.2	43.3-111		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 2-Fluorophenol	61.5	32.2-118		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: 4-Terphenyl-d14	71.1	29.7-111		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: Nitrobenzene-d5	72.6	36.6-132		%REC	1	7/29/2013 8:27:52 PM	8568
Surr: Phenol-d5	58.5	28.5-128		%REC	1	7/29/2013 8:27:52 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:45:00 AM

Lab ID: 1307A80-004

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	13000	750		mg/Kg	500	7/30/2013 8:41:09 PM	8576
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Acenaphthylene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Aniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Azobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benz(a)anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(a)pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(b)fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(g,h,i)perylene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzo(k)fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzoic acid	ND	0.97		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Benzyl alcohol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroethoxy)methane	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroethyl)ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Bromophenyl phenyl ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Butyl benzyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Carbazole	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Chloronaphthalene	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Chlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Chlorophenyl phenyl ether	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Chrysene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Di-n-octyl phthalate	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dibenz(a,h)anthracene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dibenzofuran	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,2-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,3-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,4-Dichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3,3'-Dichlorobenzidine	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Diethyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Dimethyl phthalate	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dimethylphenol	ND	0.29		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 9-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 9:45:00 AM

Lab ID: 1307A80-004

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Fluoranthene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Fluorene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorobutadiene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachlorocyclopentadiene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Hexachloroethane	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Isophorone	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1-Methylnaphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Methylnaphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3+4-Methylphenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
N-Nitrosodi-n-propylamine	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
N-Nitrosodiphenylamine	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Naphthalene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Nitroaniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
3-Nitroaniline	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Nitroaniline	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2-Nitrophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
4-Nitrophenol	ND	0.24		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pentachlorophenol	ND	0.39		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Phenanthrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Phenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pyrene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Pyridine	ND	0.49		mg/Kg	1	7/30/2013 1:15:38 AM	8568
1,2,4-Trichlorobenzene	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4,5-Trichlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
2,4,6-Trichlorophenol	ND	0.19		mg/Kg	1	7/30/2013 1:15:38 AM	8568
Surr: 2,4,6-Tribromophenol	43.8	36.5-113		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 2-Fluorobiphenyl	64.1	43.3-111		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 2-Fluorophenol	67.2	32.2-118		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: 4-Terphenyl-d14	66.9	29.7-111		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: Nitrobenzene-d5	68.8	36.6-132		%REC	1	7/30/2013 1:15:38 AM	8568
Surr: Phenol-d5	75.9	28.5-128		%REC	1	7/30/2013 1:15:38 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:00:00 AM

Lab ID: 1307A80-005

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/30/2013 8:53:33 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:00:00 AM

Lab ID: 1307A80-005

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 8:56:40 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 8:56:40 PM	8568
Surr: 2,4,6-Tribromophenol	38.9	36.5-113		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 2-Fluorobiphenyl	68.5	43.3-111		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 2-Fluorophenol	73.9	32.2-118		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: 4-Terphenyl-d14	59.4	29.7-111		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: Nitrobenzene-d5	67.2	36.6-132		%REC	1	7/29/2013 8:56:40 PM	8568
Surr: Phenol-d5	62.9	28.5-128		%REC	1	7/29/2013 8:56:40 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:15:00 AM

Lab ID: 1307A80-006

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	12000	300		mg/Kg	200	7/30/2013 9:05:58 PM	8576
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Acenaphthylene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Aniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Azobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzoic acid	ND	2.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Benzyl alcohol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Carbazole	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chloroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Chlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Chrysene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dibenzofuran	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Diethyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**

Date Reported: **8/6/2013**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:15:00 AM

Lab ID: 1307A80-006

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Fluoranthene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Fluorene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Hexachloroethane	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Isophorone	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Naphthalene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
3-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Nitroaniline	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Nitrobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2-Nitrophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
4-Nitrophenol	ND	0.50		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pentachlorophenol	ND	0.81		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Phenanthrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Phenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pyrene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Pyridine	ND	1.0		mg/Kg	1	7/30/2013 12:18:12 AM	8568
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 12:18:12 AM	8568
Surr: 2,4,6-Tribromophenol	23.7	36.5-113	S	%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 2-Fluorobiphenyl	53.8	43.3-111		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 2-Fluorophenol	44.7	32.2-118		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: 4-Terphenyl-d14	48.0	29.7-111		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: Nitrobenzene-d5	45.9	36.6-132		%REC	1	7/30/2013 12:18:12 AM	8568
Surr: Phenol-d5	47.9	28.5-128		%REC	1	7/30/2013 12:18:12 AM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:30:00 AM

Lab ID: 1307A80-007

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	21000	750		mg/Kg	500	7/30/2013 2:53:42 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:30:00 AM

Lab ID: 1307A80-007

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 9:25:29 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:25:29 PM	8568
Surr: 2,4,6-Tribromophenol	48.6	36.5-113		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 2-Fluorobiphenyl	77.4	43.3-111		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 2-Fluorophenol	83.7	32.2-118		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: 4-Terphenyl-d14	67.2	29.7-111		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: Nitrobenzene-d5	82.7	36.6-132		%REC	1	7/29/2013 9:25:29 PM	8568
Surr: Phenol-d5	82.1	28.5-128		%REC	1	7/29/2013 9:25:29 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-4

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 10:45:00 AM

Lab ID: 1307A80-008

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	16000	750		mg/Kg	500	7/30/2013 3:18:31 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzoic acid	ND	5.1		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 8-4**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 10:45:00 AM**Lab ID:** 1307A80-008**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 12:35:14 PM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 12:35:14 PM	8568
Surr: 2,4,6-Tribromophenol	44.3	36.5-113		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 2-Fluorobiphenyl	87.4	43.3-111		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 2-Fluorophenol	101	32.2-118		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: 4-Terphenyl-d14	83.4	29.7-111		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: Nitrobenzene-d5	93.7	36.6-132		%REC	1	7/30/2013 12:35:14 PM	8568
Surr: Phenol-d5	97.6	28.5-128		%REC	1	7/30/2013 12:35:14 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-5

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:00:00 AM

Lab ID: 1307A80-009

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 3:43:20 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 8-5

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:00:00 AM

Lab ID: 1307A80-009

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 9:54:16 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 9:54:16 PM	8568
Surr: 2,4,6-Tribromophenol	41.4	36.5-113		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 2-Fluorobiphenyl	77.3	43.3-111		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 2-Fluorophenol	77.4	32.2-118		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: 4-Terphenyl-d14	69.1	29.7-111		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: Nitrobenzene-d5	73.9	36.6-132		%REC	1	7/29/2013 9:54:16 PM	8568
Surr: Phenol-d5	78.8	28.5-128		%REC	1	7/29/2013 9:54:16 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:15:00 AM

Lab ID: 1307A80-010

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	3300	750		mg/Kg	500	7/30/2013 4:08:10 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Aniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Azobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Carbazole	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Chrysene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:15:00 AM

Lab ID: 1307A80-010

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Fluorene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Isophorone	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Naphthalene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Phenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pyrene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Pyridine	ND	2.5		mg/Kg	1	7/30/2013 1:04:21 PM	8568
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2013 1:04:21 PM	8568
Surr: 2,4,6-Tribromophenol	39.0	36.5-113		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 2-Fluorobiphenyl	82.9	43.3-111		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 2-Fluorophenol	87.2	32.2-118		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: 4-Terphenyl-d14	72.4	29.7-111		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: Nitrobenzene-d5	67.0	36.6-132		%REC	1	7/30/2013 1:04:21 PM	8568
Surr: Phenol-d5	83.2	28.5-128		%REC	1	7/30/2013 1:04:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 7-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:30:00 AM

Lab ID: 1307A80-011

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	14000	750		mg/Kg	500	7/30/2013 4:33:00 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzoic acid	ND	0.99		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chloroaniline	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1307A80**Date Reported: **8/6/2013****CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** POND 7-1**Project:** MSGP INSPECTION REPORT**Collection Date:** 7/22/2013 11:30:00 AM**Lab ID:** 1307A80-011**Matrix:** SOIL**Received Date:** 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Isophorone	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Methylphenol	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Nitrobenzene	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Pyridine	ND	0.49		mg/Kg	1	7/29/2013 10:23:04 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:23:04 PM	8568
Surr: 2,4,6-Tribromophenol	20.9	36.5-113	S	%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 2-Fluorobiphenyl	43.1	43.3-111	S	%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 2-Fluorophenol	44.1	32.2-118		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: 4-Terphenyl-d14	44.1	29.7-111		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: Nitrobenzene-d5	41.8	36.6-132		%REC	1	7/29/2013 10:23:04 PM	8568
Surr: Phenol-d5	41.3	28.5-128		%REC	1	7/29/2013 10:23:04 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 11-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:45:00 AM

Lab ID: 1307A80-012

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/31/2013 4:14:09 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 11-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 11:45:00 AM

Lab ID: 1307A80-012

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 10:51:50 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 10:51:50 PM	8568
Surr: 2,4,6-Tribromophenol	48.2	36.5-113		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 2-Fluorobiphenyl	79.0	43.3-111		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 2-Fluorophenol	76.4	32.2-118		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: 4-Terphenyl-d14	66.7	29.7-111		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: Nitrobenzene-d5	70.5	36.6-132		%REC	1	7/29/2013 10:51:50 PM	8568
Surr: Phenol-d5	69.8	28.5-128		%REC	1	7/29/2013 10:51:50 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:00:00 PM

Lab ID: 1307A80-013

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	9300	750		mg/Kg	500	7/30/2013 5:47:25 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Acenaphthylene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Aniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Azobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzoic acid	ND	10		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Benzyl alcohol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Carbazole	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chloroaniline	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Chlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Chrysene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dibenzofuran	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Diethyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: POND 6-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:00:00 PM

Lab ID: 1307A80-013

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Fluoranthene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Fluorene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Hexachloroethane	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Isophorone	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Methylphenol	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Naphthalene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
3-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Nitroaniline	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Nitrobenzene	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2-Nitrophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
4-Nitrophenol	ND	2.5		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pentachlorophenol	ND	4.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Phenanthrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Phenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pyrene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Pyridine	ND	5.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2013 1:33:21 PM	8568
Surr: 2,4,6-Tribromophenol	33.7	36.5-113	S	%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 2-Fluorobiphenyl	77.8	43.3-111		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 2-Fluorophenol	65.2	32.2-118		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: 4-Terphenyl-d14	67.1	29.7-111		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: Nitrobenzene-d5	71.1	36.6-132		%REC	1	7/30/2013 1:33:21 PM	8568
Surr: Phenol-d5	76.0	28.5-128		%REC	1	7/30/2013 1:33:21 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:40:00 PM

Lab ID: 1307A80-014

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	1100	30		mg/Kg	20	7/30/2013 5:59:49 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-1

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:40:00 PM

Lab ID: 1307A80-014

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/30/2013 2:02:27 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2013 2:02:27 PM	8568
Surr: 2,4,6-Tribromophenol	45.5	36.5-113		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 2-Fluorobiphenyl	87.1	43.3-111		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 2-Fluorophenol	65.6	32.2-118		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: 4-Terphenyl-d14	91.9	29.7-111		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: Nitrobenzene-d5	74.0	36.6-132		%REC	1	7/30/2013 2:02:27 PM	8568
Surr: Phenol-d5	73.3	28.5-128		%REC	1	7/30/2013 2:02:27 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:50:00 PM

Lab ID: 1307A80-015

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst: JRR		
Chloride	1500	750		mg/Kg	500	7/30/2013 6:37:03 PM	8634
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-2

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 12:50:00 PM

Lab ID: 1307A80-015

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 11:20:36 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:20:36 PM	8568
Surr: 2,4,6-Tribromophenol	52.4	36.5-113		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 2-Fluorobiphenyl	93.3	43.3-111		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 2-Fluorophenol	72.3	32.2-118		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: 4-Terphenyl-d14	85.0	29.7-111		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: Nitrobenzene-d5	80.3	36.6-132		%REC	1	7/29/2013 11:20:36 PM	8568
Surr: Phenol-d5	71.5	28.5-128		%REC	1	7/29/2013 11:20:36 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 1:00:00 PM

Lab ID: 1307A80-016

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	980	30		mg/Kg	20	7/30/2013 6:49:28 PM	8634
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Acenaphthylene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Aniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Azobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzoic acid	ND	1.0		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Benzyl alcohol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Carbazole	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chloroaniline	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Chlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Chrysene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dibenzofuran	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Diethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307A80

Date Reported: 8/6/2013

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BKGD-3

Project: MSGP INSPECTION REPORT

Collection Date: 7/22/2013 1:00:00 PM

Lab ID: 1307A80-016

Matrix: SOIL

Received Date: 7/24/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Fluoranthene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Fluorene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Hexachloroethane	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Isophorone	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Methylphenol	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Naphthalene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
3-Nitroaniline	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Nitroaniline	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Nitrobenzene	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2-Nitrophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
4-Nitrophenol	ND	0.25		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pentachlorophenol	ND	0.40		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Phenanthrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Phenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pyrene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Pyridine	ND	0.50		mg/Kg	1	7/29/2013 11:49:25 PM	8568
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/29/2013 11:49:25 PM	8568
Surr: 2,4,6-Tribromophenol	46.4	36.5-113		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 2-Fluorobiphenyl	81.7	43.3-111		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 2-Fluorophenol	69.3	32.2-118		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: 4-Terphenyl-d14	76.8	29.7-111		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: Nitrobenzene-d5	88.5	36.6-132		%REC	1	7/29/2013 11:49:25 PM	8568
Surr: Phenol-d5	74.9	28.5-128		%REC	1	7/29/2013 11:49:25 PM	8568

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	MB-8576		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 8576		RunNo: 12237					
Prep Date:	7/26/2013		Analysis Date: 7/26/2013		SeqNo: 348052		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-8576		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 8576		RunNo: 12237					
Prep Date:	7/26/2013		Analysis Date: 7/26/2013		SeqNo: 348053		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

Sample ID	MB-8634		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	8634		RunNo:	12307				
Prep Date:	7/30/2013		Analysis Date:	7/30/2013		SeqNo:	350015		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-8634		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 8634		RunNo: 12307					
Prep Date:	7/30/2013		Analysis Date: 7/30/2013		SeqNo: 350016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	mb-8568	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	8568	RunNo:	12261					
Prep Date:	7/25/2013	Analysis Date:	7/29/2013	SeqNo:	348582	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	1.0								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	mb-8568		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 8568		RunNo: 12261					
Prep Date:	7/25/2013		Analysis Date: 7/29/2013		SeqNo: 348582		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	0.96		3.330		28.9	36.5	113			S
Surr: 2-Fluorobiphenyl	1.2		1.670		74.7	43.3	111			
Surr: 2-Fluorophenol	2.0		3.330		60.0	32.2	118			
Surr: 4-Terphenyl-d14	1.1		1.670		64.7	29.7	111			
Surr: Nitrobenzene-d5	1.3		1.670		80.6	36.6	132			
Surr: Phenol-d5	2.4		3.330		71.4	28.5	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	1307a80-001ams	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	POND 6-1	Batch ID:	8568	RunNo:	12294					
Prep Date:	7/25/2013	Analysis Date:	7/30/2013	SeqNo:	349614	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	1.0	1.686	0	70.9	25.6	142			
4-Chloro-3-methylphenol	ND	2.5	3.363	0	51.8	63.7	100			S
2-Chlorophenol	1.7	1.0	3.363	0	51.2	22.2	126			
1,4-Dichlorobenzene	1.1	1.0	1.686	0	63.4	12.4	115			
2,4-Dinitrotoluene	ND	2.5	1.686	0	33.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	1.0	1.686	0	63.9	13.9	136			
4-Nitrophenol	ND	1.3	3.363	0	30.5	36.7	130			S
Pentachlorophenol	ND	2.0	3.363	0	39.9	15.8	113			
Phenol	1.8	1.0	3.363	0	52.5	25.1	124			
Pyrene	ND	1.0	1.686	0	42.4	35.8	124			
1,2,4-Trichlorobenzene	ND	1.0	1.686	0	58.2	30	113			
Surr: 2,4,6-Tribromophenol	1.1		3.363		32.2	36.5	113			S
Surr: 2-Fluorobiphenyl	1.1		1.686		68.0	43.3	111			
Surr: 2-Fluorophenol	1.8		3.363		53.1	32.2	118			
Surr: 4-Terphenyl-d14	0.94		1.686		55.5	29.7	111			
Surr: Nitrobenzene-d5	1.1		1.686		64.9	36.6	132			
Surr: Phenol-d5	1.9		3.363		57.9	28.5	128			

Sample ID	1307a80-001amsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	POND 6-1	Batch ID:	8568	RunNo:	12294					
Prep Date:	7/25/2013	Analysis Date:	7/30/2013	SeqNo:	349615	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.1	0.99	1.658	0	63.4	25.6	142	12.8	22	
4-Chloro-3-methylphenol	ND	2.5	3.307	0	52.5	63.7	100	0	27.3	S
2-Chlorophenol	1.7	0.99	3.307	0	50.7	22.2	126	2.75	26.3	
1,4-Dichlorobenzene	ND	0.99	1.658	0	57.7	12.4	115	200	27.4	
2,4-Dinitrotoluene	ND	2.5	1.658	0	34.6	14.9	142	0	27.4	
N-Nitrosodi-n-propylamine	1.2	0.99	1.658	0	71.8	13.9	136	9.96	22.6	
4-Nitrophenol	ND	1.2	3.307	0	30.4	36.7	130	0	20	S
Pentachlorophenol	ND	2.0	3.307	0	38.9	15.8	113	0	27.1	
Phenol	1.9	0.99	3.307	0	56.9	25.1	124	6.48	32.2	
Pyrene	ND	0.99	1.658	0	36.6	35.8	124	0	29.5	
1,2,4-Trichlorobenzene	ND	0.99	1.658	0	55.6	30	113	0	27.8	
Surr: 2,4,6-Tribromophenol	1.1		3.307		32.2	36.5	113	0	0	S
Surr: 2-Fluorobiphenyl	0.90		1.658		54.5	43.3	111	0	0	
Surr: 2-Fluorophenol	2.0		3.307		61.8	32.2	118	0	0	
Surr: 4-Terphenyl-d14	0.86		1.658		52.0	29.7	111	0	0	
Surr: Nitrobenzene-d5	0.98		1.658		59.4	36.6	132	0	0	
Surr: Phenol-d5	2.1		3.307		63.1	28.5	128	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307A80

06-Aug-13

Client: Western Refining Southwest, Gallup

Project: MSGP INSPECTION REPORT

Sample ID	lcs-8568		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 8568		RunNo: 12301					
Prep Date:	7/25/2013		Analysis Date: 7/31/2013		SeqNo: 349866		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.20	1.670	0	99.0	45.8	95.8			S
4-Chloro-3-methylphenol	3.0	0.50	3.330	0	91.3	49.9	103			
2-Chlorophenol	2.9	0.20	3.330	0	88.3	43.4	94			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.2	37.3	95.4			
2,4-Dinitrotoluene	1.6	0.50	1.670	0	94.7	51.6	113			
N-Nitrosodi-n-propylamine	1.7	0.20	1.670	0	103	43.4	105			
4-Nitrophenol	2.0	0.25	3.330	0	59.0	45.4	113			
Pentachlorophenol	2.3	0.40	3.330	0	70.2	40	90.2			
Phenol	1.8	0.20	3.330	0	54.2	44.4	99.8			
Pyrene	1.9	0.20	1.670	0	115	48.1	93.1			S
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	84.1	41.6	103			
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	36.5	113			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.2	43.3	111			
Surr: 2-Fluorophenol	2.7		3.330		81.6	32.2	118			
Surr: 4-Terphenyl-d14	1.9		1.670		115	29.7	111			S
Surr: Nitrobenzene-d5	1.5		1.670		90.1	36.6	132			
Surr: Phenol-d5	1.9		3.330		57.4	28.5	128			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1307A80

RcptNo: 1

Received by/date:

AG 07/24/13

Logged By: Anne Thorne

7/24/2013 8:00:00 AM



Completed By: Anne Thorne

7/24/2013



Reviewed By:

IO

07/24/13

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? FedEx

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes			

Chavez, Carl J, EMNRD

From: Riege, Ed <Ed.Riege@wnr.com>
Sent: Thursday, November 14, 2013 5:09 PM
To: Kieling, John, NMENV
Cc: Cobrain, Dave, NMENV; Dhawan, Neelam, NMENV; De Saillan, Charles, NMENV; Chavez, Carl J, EMNRD; VonGonten, Glenn, EMNRD; king.laurie@epa.gov; VanHorn, Kristen, NMENV; McClain, Jr, Billy; Allen, Ann; Hains, Allen
Subject: Response To Request For SWMU Assessment Report - Hydrocarbon Seep
Attachments: Letter and Table 1.pdf; WestRef-B179 Fig 1 Location Map of SB-Temp Well_Hand Auger_Excavation.pdf

Mr. Kieling,

Attached is the response to the request for SWMU Assessment Report - Hydrocarbon Seep. The signed original is in the US mail.

Thanks,

Ed Riege MPH
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

November 14, 2013

Via Email and Certified Mail 7010 1670 0001 3141 1245, Return Receipt Requested

Mr. John E. Kieling, Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, New Mexico 87505-6303

**RE: RESPONSE TO REQUEST FOR SWMU ASSESSMENT REPORT - HYDROCARBON
SEEP
WESTERN REFINING COMPANY, SOUTHWEST, INC., GALLUP REFINERY
EPA ID # NMD000333211
AP-111**

Dear Mr. Kieling:

Western Refining Southwest, Gallup Refinery ("Western") submits this letter in response to the New Mexico Environment Department, Hazardous Waste Bureau's, (the "Bureau") letters dated July 31, 2013 and August 14, 2013 that requested a Solid Waste Management Unit (SWMU) Assessment Report under the August 2000 Hazardous Waste Facility Permit (the "Permit") Section IV.B.2.b for the hydrocarbon seep that was discovered to the west of crude tank T-102 and northwest of the marketing tanks (T1-T8). In addition, this letter addresses the Bureau's letter of November 8, 2013 addressed to Ms. Ann Allen. The identification of the hydrocarbon seep was reported on Form C-141 on July 11, 2013. Since the initial discovery, Western Refining Southwest, Gallup Refinery ("Western") has implemented emergency response measures as previously reported in Hydrocarbon Release Notification Reports dated August 20, 2013 and October 18, 2013.

Subsequent to the initial release report and the October 18, 2013 update report, Western has continued efforts to identify the source of the hydrocarbon seep, including installation of additional temporary monitoring wells (Figure 1), collection of groundwater samples, and excavation of portions of the wastewater collection pipeline near the bundle cleaning pad. The results of recent chemical analyses of the groundwater samples that have been received to-date are enclosed. Also, recovery operations continue at the temporary sump locations with the estimated recovery volumes provided in enclosed Table 1.

As reported earlier, the camera survey indicated a potential hole in the wastewater collection pipeline approximately 20 feet south of a surface drain located just west of the bundle cleaning pad (Figure 1). The wastewater pipeline was excavated and the source of the release was confirmed to be the wastewater pipeline (see enclosed photos of excavated section of steel pipeline). The wastewater collection pipeline upstream of the corroded portion of the pipeline was plugged off at the sewer box located west of the I/E shop on October 28, 2013. Additional excavation of the wastewater pipeline is scheduled to be conducted over the next several weeks to gather more information on the extent of the corroded pipe.

As the source of the release is the wastewater collection system, which is already included as SWMU No. 12 – Contact Wastewater Collection System, a SWMU assessment report is not required under Permit section IV.B.2.b., as this provision only applies to “new” SWMUs or AOCs. SWMU No. 12 is also listed in the new RCRA permit Table E-2 as requiring an Investigation Work Plan. (Note that Western is considering an appeal of the newly issued RCRA permit.)

In response to your letter of November 8, 2013, which raises several questions in regards to the sampling effort Western offers the following clarifications.

- As noted in your first sentence on this topic, the soil samples were collected only for waste characterization purposes. Clearly it is not possible to obtain a sample of soils for waste disposal purposes that have been excavated or generated during drilling operations that are “undisturbed samples.” The purpose of these samples is only to characterize the concentrations of potential contaminants in the soils being disposed, not to characterize concentrations of potential contaminants that may be present in in-situ soils. Also, waste analysis using TCLP procedures is a common practice for waste characterization.
- The sampling conducted to-date has been focused on supporting emergency response efforts to; (1) identify the source of the hydrocarbons observed at the seep location and (2) ensure that appropriate emergency measures are implemented to control the seep discharge and any significant migration of potential contaminants in the shallow groundwater. While the information being collected may facilitate preparation of a site investigation report, the sampling effort is not intended to supplant a RCRA facility investigation.

Please note that Western continues to disagree with the Bureau on the other parts of the November 8th letter. As always, Western reserves all applicable rights and defenses relevant to this matter.

If there are any questions, then please contact me at 505-722-0202.

Sincerely,



Mr. William Carl McClain, Jr.
Refinery Manager
Western Refining Southwest, Inc. – Gallup Refinery

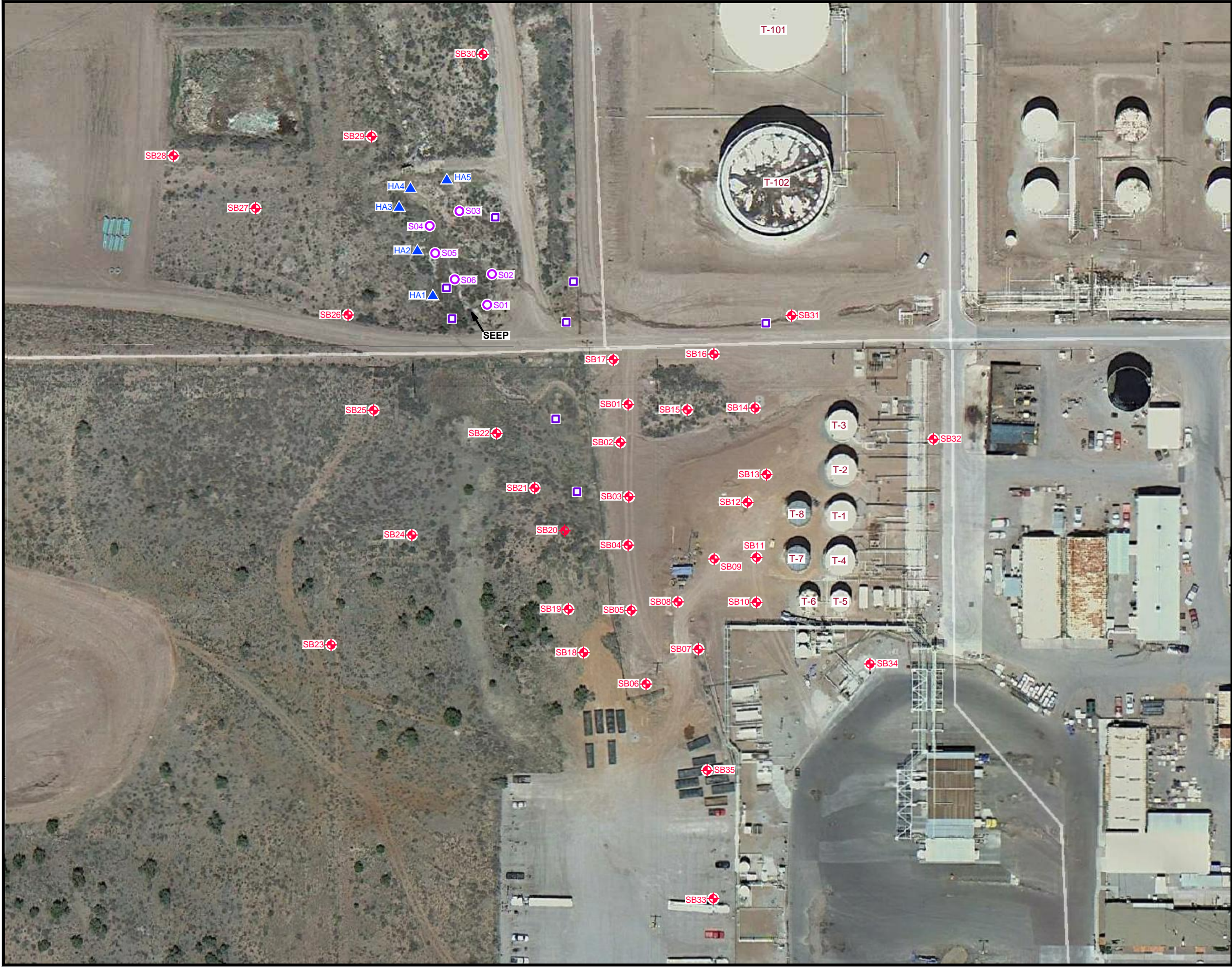
cc D. Cobrain NMED HWB without enclosure
 N. Dhawan, NMED HWB without enclosure
 C. de Saillan, NMED HWB without enclosure
 Carl Chavez, OCD
 G. von Gonten, OCD
 L. King, EPA Region 6
 A. Allen, Western El Paso
 Ed Riege, Western Gallup
 Allen Hains, Western El Paso

Table 1
Temporary Sump Recovery Volumes
September 2013 Hydrocarbon Release
Western Refining Southwest, Inc., Gallup Refinery

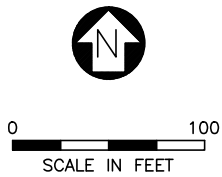
DATE	Hydrocarbon Recovered (gallons)	Water Recovered (gallons)	Total Fluids Recovered (gallons)
6/26/2013 - 8/13/2013	?	?	27,000
9/3/2013 ¹	682	3,818	4,500
9/3/2013 ¹	367	4,133	4,500
9/4/2013	62	3,938	4,000
9/6/2013	62	3,938	4,000
9/9/2013	30	4,470	4,500
9/11/2013	30	4,470	4,500
9/13/2013	62	3,938	4,000
9/16/2013	135	5,140	5,275
9/18/2013	125	4,111	4,236
9/24/2013	58	4742	4800
9/26/2013	16	4220	4236
10/2/2013	29	4918	4947
10/8/2013	30	4569	4599
10/18/2013	109	5059	5168
10/28/2013	199	5379	5578
10/29/2013	63	4,049	4,112
11/12/2013	205	5,275	5,480
total ²	2,264	76,167	105,431

1 - two loads were removed on this date

2 - separate totals for hydrocarbon and water not available for full time period



Aerial Map Source: Google Map, 05/03/2012.



LEGEND

- SB01 SOIL BORING / TEMPORARY WELL LOCATION
- HA1 HAND AUGER LOCATION
- EXCAVATION LOCATION
- S01 TEMPORARY SUMP



PROJ. NO.: Western Refining | DATE: 11/12/13 | FILE: WestRef-B179

FIGURE 1
LOCATION MAP OF
SOIL BORING / TEMPORARY WELL,
HAND AUGER AND EXCAVATION

Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298

October 18, 2013

Via Email and Certified Mail 7011 2970 0003 9281 8428, Return Receipt Requested

Mr. Carl Chavez
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**RE: HYDROCARBON RELEASE NOTIFICATION REPORT UPDATE
WESTERN REFINING COMPANY, SOUTHWEST, INC., GALLUP REFINERY
EPA ID # NMD000333211
AP-111**

Dear Mr. Chavez:

Western Refining Southwest, Gallup Refinery ("Western") submits an update to our initial Hydrocarbon Release Notification Report (dated August 20, 2013). The following spill response actions have been taken to address a discovery of hydrocarbons found on the land surface to the west of crude tank T-102 and northwest of the marketing tanks (T1-T8), which was reported in Form C-141 on July 11, 2013. We are providing a copy of this report to the New Mexico Environment Department, Hazardous Waste Bureau (the "Bureau"), in satisfaction of the Bureau's requests in letters dated July 31, 2013 and August 14, 2013 for a written notification report describing all investigation and clean-up actions.

Actions Completed To-Date

As reported in the first Hydrocarbon Release Notification Report, a series of 14 excavations were completed in the area of the seep to the west Tank T-102. Six of the excavations were completed as temporary recovery sumps. The groundwater and any hydrocarbons that enter the sumps are removed with a vacuum truck and placed into the wastewater treatment system up-steam of the API Separator. The volume of total liquids (groundwater and hydrocarbons) recovered from June 26, 2013 through October 8, 2013 is estimated to be 85,000 gallons (Table 1). The initial material recovered was estimated to be 50% water and 50% hydrocarbon; however, the percentage of hydrocarbon reduced significantly over the first couple of weeks.

Efforts to identify the source of the hydrocarbons completed through August 20, 2013 were reported in the initial Hydrocarbon Release Notification Report. As discussed in the initial Hydrocarbon Release Notification Report, Western had planned to conduct additional leak detection surveys using methods such as *Tracer Tight*® or *HeliTek*®, but due to safety concerns these techniques could not be used within the subject area of the refinery. Since the August 20th report, additional actions as described below have been conducted to identify the source(s) of the hydrocarbons:

1. Additional dye tracer tests were conducted on the process sewer system;

2. Physical inspections of the process sewer system, including a completion of a camera survey identified a hole in the sewer line on the west side of the bundle cleaning pad;
3. Additional site inspections of aboveground equipment were conducted to identify any evidence of possible sources of the hydrocarbon;
4. Elevations of the ground level and top of casing were measured at the temporary well completions and sump locations; and
5. A potentiometric map and cross-sections of the shallow subsurface in the area of the temporary wells were prepared.

Two additional dye tests were conducted in the process sewer system. A yellow/green dye was introduced into the sewer at the transmix unloading area (a short distance northwest of the main product loading racks) on September 23, 2013 and a red dye was introduced at the lab sinks on September 24, 2013. A subsequent fluid level gauging event was conducted at the temporary monitoring wells on September 26, 2013 (Table 2). The red dye has been identified in five of the temporary wells (SB01, SB02, SB16, SB17, and SB22), all of which are located just south of the road that runs east-west along the north side of the marketing tanks. The green/yellow dye appears to be present in nine wells (SB04, SB05, SB06, SB08, SB10, SB11, SB19, SB20, and SB21), which are all located toward the southern portion of the area that has been investigated to-date. Although the dye tests are not conclusive, the separate patterns of the two dyes suggest the possibility of two separate release areas from the sewer lines. The red dye appears to have exited the sewer line from a hole identified near the bundle cleaning pad (see discussion below). The source of the yellow/green dye is not currently known, but appears to be south of the hole recently identified in the sewer line.

A camera survey was conducted on multiple segments of the sewer line in the western portion of the refinery on August 27 and 28. Based on this visual inspection, a hole in the sewer line was identified approximately 20 feet south of the sewer box on the west side of the bundle cleaning pad. The location of the identified release point in the sewer line is shown on the enclosed potentiometric surface map (Figure 1).

On August 19 an operator inspecting aboveground equipment to identify any evidence of possible sources of the hydrocarbon seep, observed hydrocarbon on the land surface in the secondary containment east of tank T-3. The location of the leak, which is just west of the above ground pipeline rack that runs north to south along the east side of the marketing tank farm, is shown on Figure 1. Once the release was discovered, a small earthen containment berm was built approximately 10 ft to the west of the release. A sandpiper pump was then set up to transfer the hydrocarbon (approximately 1.5 barrels) to the process sewer. Operations were then able to isolate the underground pipeline that was leaking. The transmix/slop 6 to 8 inch pipeline is only used during the unloading of transmix trucks at the truck rack, thus it would only have been an intermittent source. Trucks are unloaded at the rack and this line transports the transmix/slop to T-231. The line was taken out of service, cleaned and blanked off. The line is being replaced with an aboveground pipeline.

The impacted soil was removed by Envirotech using hand shovels and placed into a roll-off box. Approximately 15 cubic yards were removed. Soil confirmation samples were collected from the bottom of the excavation and waste characterization samples were also collected during the

week of October 7, 2013. The soils remain on-site pending receipt of the waste characterization analyses.

As reported in our earlier August 20th report, waste characterization samples were collected from the soils generated during excavation for the sumps and the drill cuttings from the temporary well installations. The analyses demonstrated the soils were not characteristically hazardous, but did contain petroleum hydrocarbons. The soils from the initial excavations for the sumps and drill cuttings have been disposed off-site as hydrocarbon impacted soils.

Using the new survey data for the temporary monitoring wells, a potentiometric surface map (Figure 1) and cross-sections (Figures 3 and 4) were prepared for the subject investigation area. The potentiometric surface mirrors the land surface topography and slopes to the northwest. Cross-section A-A' runs north-south and extends from the southernmost temporary well SB06 to hand auger location HA4, which is located near the discharge area to the northwest. Two west to east cross-sections B-B' and C-C' are included on Figure 4. All temporary wells appear to be completed in the same hydrogeologic unit, which varies from silty, clayey sand to sandy clay, with the exception of SB10. Temporary well SB10 is completed in a perched zone consisting of silty sand, which may be part of the fill material that is found to overlie native soils over much of the area. A saturated interval of fill composed of clay, sand, and gravel appears at a similar stratigraphic position in SB07 (boring logs provided in August 20th report); however, SB07 was completed in the deeper clayey sand interval that does appear to be in direct hydraulic communication with the other temporary wells. The perched zone appears to be of limited aerial extent and does not affect contaminant transport to the northwest as it terminates well short of the currently defined hydrocarbon plume.

In summary, two potential sources have been identified that could have resulted in the discharge of petroleum hydrocarbons at the land surface, as discovered on June 26, 2013. The hole in the sewer line on the west side of the bundle cleaning pad and the leak in the transmix/slop oil transfer line are within approximately 70 feet of each other and are hydraulically up-gradient of the seep area. Dye tests confirm the potential for materials released from the hole in the sewer line near the bundle cleaning pad to migrate to the area of the seep. Separate dye tests suggest the potential for another release point further south.

Future Actions

Western will continue efforts to further characterize potential source areas, to recover phase-separated hydrocarbons (PSH) and to delineate the lateral extent of impacts to groundwater. These efforts will be accomplished by the following tasks.

- Sewer line repairs are currently underway. This will provide an opportunity to better examine the nature of the release identified west of the bundle cleaning pad. As possible, some overexcavation during the sewer line repair may be conducted to remove impacted soils. Upon completion of the repairs, potentially additional dye tracer tests will be conducted.
- A total of 26 temporary monitoring wells (22 soil borings and 4 hand-auger locations) were previously completed over a relatively small area west of the marketing tanks. A number of the temporary wells are in locations making them subject to damage due to normal refinery operations in this area. The temporary wells were reviewed based on thickness of higher transmissive sediments (e.g., sand vs. silty clay), measured thickness of phase-separated hydrocarbons, and position of surrounding wells to select wells to be plugged vs. recompleted as permanent monitoring wells. Ten of the 22 soil

boring temporary wells will be plugged and two of the four hand-auger borings will be plugged. The remaining 12 temporary wells will be recompleted as permanent monitoring wells and two of the hand-auger locations will be completed as permanent monitoring wells.

Approximately 12 additional temporary wells are planned in an effort to further define the lateral extent of groundwater impacts and to assess other potential sources to the southeast of the marketing tanks.

- Recovery operations at the six sumps will continue to remove any PSH and impacted groundwater that accumulates in the sumps.

If there are any questions regarding the actions taken to-date or planned further actions, then please contact me at 505-722-0217. Please note Western makes no admissions and reserves all applicable rights and defenses relevant to this matter.

Sincerely,



Ed Riege
Environmental Manager
Western Refining Southwest, Inc. – Gallup Refinery

Enclosures

cc G. von Gonten, OCD without enclosure
 J. Kieling, NMED HWB with enclosure
 N. Dhawan, NMED HWB without enclosure
 T. Blaine, NMED without enclosure
 D. Cobrain, NMED HWB without enclosure
 K. Van Horn, NMED HWB with enclosure
 A. Allen, Western El Paso

Table 1
Temporary Sump Recovery Volumes
September 2013 Hydrocarbon Release
Western Refining Southwest, Inc., Gallup Refinery

DATE	Hydrocarbon Recovered (gallons)	Water Recovered (gallons)	Total Fluids Recovered (gallons)
6/26/2013 - 8/13/2013	?	?	27,000
9/3/2013 ¹	682	3,818	4,500
9/3/2013 ¹	367	4,133	4,500
9/4/2013	62	3,938	4,000
9/6/2013	62	3,938	4,000
9/9/2013	30	4,470	4,500
9/11/2013	30	4,470	4,500
9/13/2013	62	3,938	4,000
9/16/2013	135	5,140	5,275
9/18/2013	125	4,111	4,236
9/24/2013	58	4742	4800
9/26/2013	16	4220	4236
10/2/2013	29	4918	4947
10/8/2013	30	4569	4599
total ²	1,688	56,405	85,093

1 - two loads were removed on this date

2 - separate totals for hydrocarbon and water not available for full time period

Table 2
Fluid Level Measurements
Western Refining Southwest, Inc., Gallup Refinery

Loc.	Date	Top of Casing (ft msl)	Specific Gravity	Depth to HC (ft btoc)	Depth to GW (ft btoc)	Apparent Hydrocarbon Thickness (feet)	Corrected Groundwater Elevation (feet MSL)	Comments
HA1	07/11/13	215.38	0.7970	ND	6.60	0.00	208.78	
	07/12/13	215.38	0.7970	ND	6.60	0.00	208.78	
	07/17/13	215.38	0.7970	ND	6.80	0.00	208.58	
	08/14/13	215.38	0.7970	ND	9.19	0.00	206.19	
	09/25/13	215.38	0.7970	5.44	6.36	0.92	209.75	
HA2	07/12/13	212.86	0.7970	ND	5.51	0.00	207.35	
	07/17/13	212.86	0.7970	ND	5.82	0.00	207.04	
	08/14/13	212.86	0.7970	ND	5.31	0.00	207.55	
	09/25/13	212.86	0.7970	ND	4.80	0.00	208.06	Clear - slight odor detected
HA3	07/12/13	210.84	0.7970	ND	6.40	0.00	204.44	
	07/17/13	210.84	0.7970	ND	6.68	0.00	204.16	
	08/14/13	210.84	0.7970	ND	4.28	0.00	206.56	
	09/25/13	210.84	0.7970	ND	4.01	0.00	206.83	Clear - slight odor detected
HA4	07/12/13	211.26	0.7970	ND	6.41	0.00	204.85	
	07/17/13	211.26	0.7970	ND	6.78	0.00	204.48	
	08/14/13	211.26	0.7970	ND	4.94	0.00	206.32	
	09/26/13	211.26	0.7970	ND	4.50	0.00	206.76	Clear - slight odor detected
HA5	07/12/13	NM	0.7970	ND	5.50	0.00	NA	
	07/17/13	NM	0.7970	NM	NM	NA	NA	well destroyed
SB01	07/17/13	229.84	0.7970	11.50	16.74	5.24	217.28	
	07/25/13	229.84	0.7970	10.85	16.55	5.70	217.83	
	08/14/13	229.84	0.7970	9.88	9.91	0.03	219.95	Has reddish tint - trace of dye?
	09/26/13	229.84	0.7970	9.51	15.19	5.68	219.18	Red - dye - odor
SB02	07/17/13	227.85	0.7970	10.26	10.58	0.32	217.53	
	07/25/13	227.85	0.7970	9.68	9.97	0.29	218.11	
	08/14/13	227.85	0.7970	8.74	9.12	0.38	219.03	
	09/26/13	227.85	0.7970	8.25	8.45	0.20	219.56	red/orange tint - traces of dye
SB03	07/17/13	231.43	0.7970	ND	11.40	0.00	220.03	
	07/25/13	231.43	0.7970	ND	12.84	0.00	218.59	
	08/14/13	231.43	0.7970	ND	12.01	0.00	219.42	
	09/26/13	231.43	0.7970	ND	11.49	0.00	219.94	Clear - slight odor
SB04	07/17/13	232.24	0.7970	ND	13.62	0.00	218.62	
	07/25/13	232.24	0.7970	ND	12.98	0.00	219.26	
	08/14/13	232.24	0.7970	ND	12.19	0.00	220.05	
	09/26/13	232.24	0.7970	11.72	11.79	0.07	220.51	Dark w/traces of yw-grn dye
SB05	07/17/13	234.52	0.7970	14.92	15.95	1.03	219.39	
	07/25/13	234.52	0.7970	14.48	15.40	0.92	219.85	
	08/14/13	234.52	0.7970	13.66	13.75	0.09	220.84	
	09/26/13	234.52	0.7970	13.2	14.25	1.05	221.11	Dark w/traces of yw-grn dye
SB06	07/22/13	235.65	0.7970	14.10	14.11	0.01	221.55	
	07/25/13	235.65	0.7970	14	14.01	0.01	221.65	
	08/14/13	235.65	0.7970	ND	13.07	0.00	222.58	
	09/26/13	235.65	0.7970	12.19	12.4	0.21	223.42	Dark w/traces of yw-grn dye

Table 2
Fluid Level Measurements
Western Refining Southwest, Inc., Gallup Refinery

Loc.	Date	Top of Casing (ft msl)	Specific Gravity	Depth to HC (ft btoc)	Depth to GW (ft btoc)	Apparent Hydrocarbon Thickness (feet)	Corrected Groundwater Elevation (feet MSL)	Comments
SB07	07/22/13	239.73	0.7970	14.84	14.85	0.01	224.89	
	07/25/13	239.73	0.7970	14.78	14.79	0.01	224.95	
	08/14/13	239.73	0.7970	ND	13.49	0.00	226.24	
	09/26/13	239.73	0.7970	ND	12.64	0.00	227.09	
SB08	07/22/13	241.29	0.7970	17.88	19.74	1.86	223.03	
	07/25/13	241.29	0.7970	17.80	19.68	1.88	223.11	
	08/14/13	241.29	0.7970	16.65	18.80	2.15	224.20	
	09/26/13	241.29	0.7970	15.96	18.25	2.29	224.87	Dark w/traces of yw-grn dye
SB09	07/22/13	240.69	0.7970	16.64	16.65	0.01	224.05	
	07/25/13	240.69	0.7970	ND	16.65	0.00	224.04	
	08/14/13	240.69	0.7970	ND	14.83	0.00	225.86	
	09/26/13	240.69	0.7970	NM	NM	NA	NA	Bermed area full of water
SB10	07/22/13	241.30	0.7970	ND	8.29	0.00	233.01	
	07/25/13	241.30	0.7970	ND	7.74	0.00	233.56	
	08/14/13	241.30	0.7970	7.57	9.14	1.57	233.41	
	09/26/13	241.30	0.7970	7.35	7.85	0.50	233.85	Dark w/traces of yw-grn dye
SB11	07/22/13	242.26	0.7970	ND	ND	0.00	NA	
	07/25/13	242.26	0.7970	NM	NM	NA	NA	
	08/14/13	242.26	0.7970	14.06	14.08	0.02	228.20	
	09/26/13	242.26	0.7970	13.23	13.45	0.22	228.99	Dark w/traces of yw-grn dye
SB12	07/22/13	241.25	0.7970	14.13	14.14	0.01	227.12	
	07/25/13	241.25	0.7970	ND	14.18	0.00	227.07	
	08/14/13	241.25	0.7970	ND	14.72	0.00	226.53	
	09/26/13	241.25	0.7970	ND	13.15	0.00	228.10	
SB13	07/22/13	241.85	0.7970	ND	15.21	0.00	226.64	
	07/25/13	241.85	0.7970	ND	15.03	0.00	226.82	
	08/14/13	241.85	0.7970	ND	14.75	0.00	227.10	
	09/26/13	241.85	0.7970	ND	13.65	0.00	228.20	
SB14	07/25/13	240.79	0.7970	ND	16.09	0.00	224.70	
	08/14/13	240.79	0.7970	ND	15.70	0.00	225.09	
	09/26/13	240.79	0.7970	ND	15.25	0.00	225.54	
SB15	07/25/13	239.04	0.7970	ND	19.46	0.00	219.58	
	08/14/13	239.04	0.7970	ND	18.54	0.00	220.50	
	09/26/13	239.04	0.7970	ND	17.83	0.00	221.21	
SB16	07/25/13	234.64	0.7970	11.04	14.20	3.16	222.96	
	08/14/13	234.64	0.7970	10.76	11.36	0.60	223.76	Has reddish tint - trace of dye?
	09/26/13	234.64	0.7970	10.34	10.69	0.35	224.23	orange w/red tint - traces of dye
SB17	07/25/13	229.88	0.7970	12.00	12.13	0.13	217.85	
	08/14/13	229.88	0.7970	11.09	11.25	0.16	218.76	
	09/26/13	229.88	0.7970	9.79	13.02	3.23	219.43	orange w/red tint - traces of dye

Table 2
Fluid Level Measurements
Western Refining Southwest, Inc., Gallup Refinery

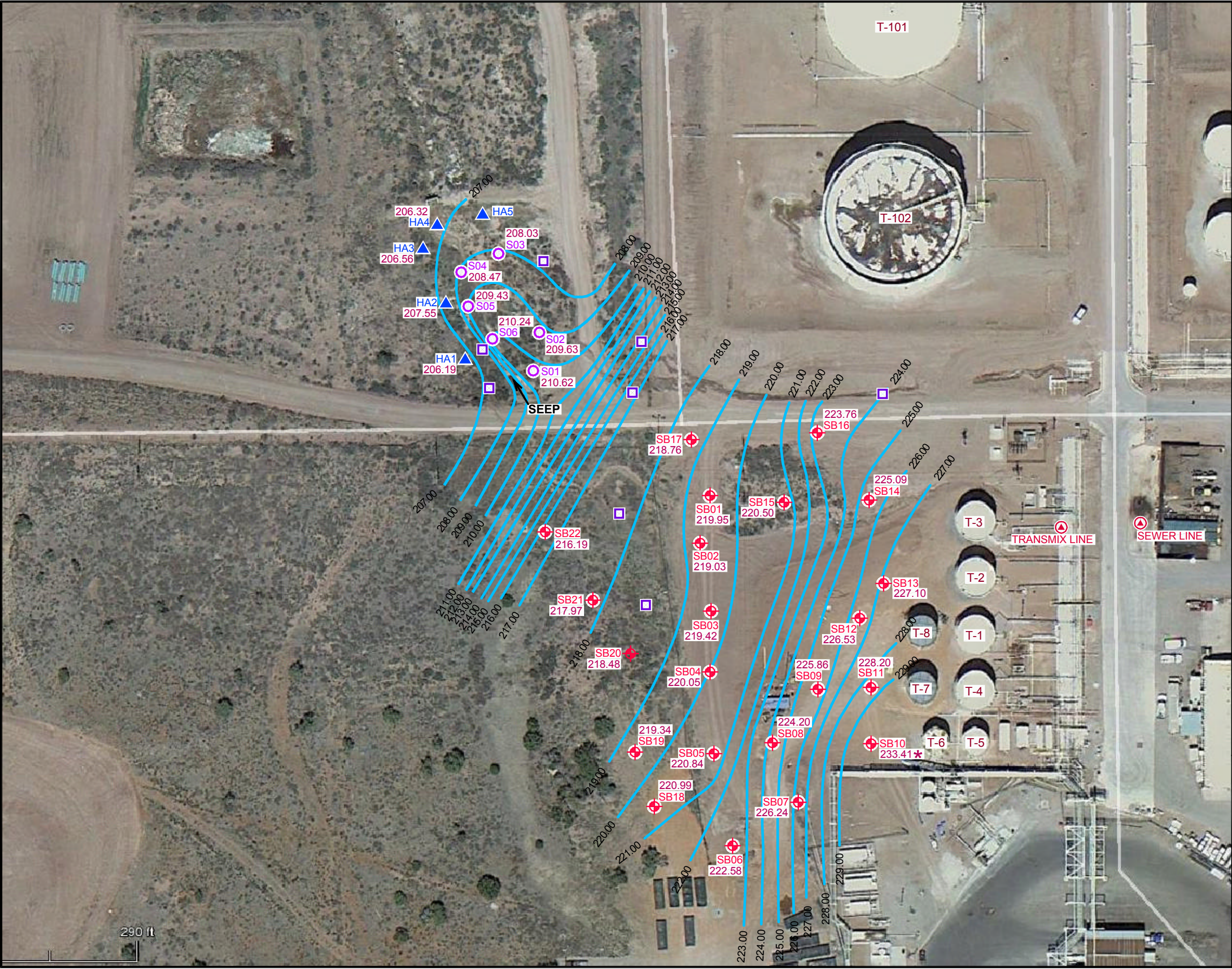
Loc.	Date	Top of Casing (ft msl)	Specific Gravity	Depth to HC (ft btoc)	Depth to GW (ft btoc)	Apparent Hydrocarbon Thickness (feet)	Corrected Groundwater Elevation (feet MSL)	Comments
SB18	07/25/13	238.53	0.7970	ND	18.58	0.00	219.95	
	08/14/13	238.53	0.7970	ND	17.54	0.00	220.99	
	09/26/13	238.53	0.7970	ND	14.6	0.00	223.93	
SB19	07/25/13	237.74	0.7970	ND	19.45	0.00	218.29	
	08/14/13	237.74	0.7970	18.30	18.80	0.50	219.34	
	09/26/13	237.74	0.7970	17.3	21.3	4.00	219.63	Dark w/traces of yw-grn dye
SB20	07/25/13	232.05	0.7970	13.62	16.24	2.62	217.90	
	08/14/13	232.05	0.7970	12.88	16.3	3.42	218.48	
	09/26/13	232.05	0.7970	12.37	15.4	3.03	219.06	Dark w/traces of yw-grn dye
SB21	07/25/13	227.33	0.7970	9.93	12.15	2.22	216.95	
	08/14/13	227.33	0.7970	9.20	9.98	0.78	217.97	
	09/26/13	227.33	0.7970	8.49	9.57	1.08	218.62	Dark w/traces of yw-grn dye
SB22	07/25/13	223.96	0.7970	7.89	10.99	3.10	215.44	
	08/14/13	223.96	0.7970	6.77	7.91	1.14	216.96	
	09/26/13	223.96	0.7970	6.35	9.45	3.10	216.98	red/orange tint - traces of dye
S-1	08/14/13	214.41	0.7970	3.76	3.89	0.13	210.62	
	9/25/2013	214.41	0.7970	2.97	4	1.03	211.23	
S-2	08/14/13	215.55	0.7970	5.90	6.01	0.11	209.63	
	9/25/2013	215.55	0.7970	5.28	5.66	0.38	210.19	
S-3	08/14/13	213.08	0.7970	5.02	5.19	0.17	208.03	
	9/25/2013	213.08	0.7970	4.44	4.69	0.25	208.59	
S-4	08/14/13	211.42	0.7970	3.70	ND	3.70	NA	
	9/25/2013	211.42	0.7970	3.04	3.11	0.07	208.37	
S-5	08/14/13	213.19	0.7970	3.71	3.96	0.25	209.43	
	9/25/2013	213.19	0.7970	3.02	3.48	0.46	210.08	
S-6	08/14/13	214.28	0.7970	3.96	4.37	0.41	210.24	
	9/25/2013	214.28	0.7970	3.3	3.85	0.55	210.87	

ND - no product detected

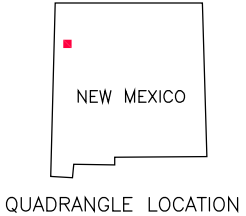
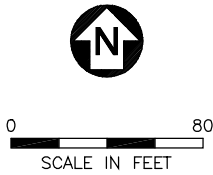
NM - not measured

NA - not available

Specific gravity calculated using an API Gravity of 45.7.



Aerial Map Source: Google Map, 05/03/2012.



LEGEND

- SB01 SOIL BORING / TEMPORARY WELL LOCATION
- HA1 HAND AUGER LOCATION
- EXCAVATION LOCATION
- S01 TEMPORARY SUMP
- 219.00 POTENTIOMETRIC CONTOUR (FT)
- 219.95 GROUNDWATER ELEVATION (FT) MEASURED ON AUGUST 14, 2013
- DATA POINT NOT USED FOR CONTOURS
- RELEASE POINT

NOTE:
ELEVATIONS BASED ON PLANT DATUM,
WHICH IS 6,707.54 FT ABOVE MEAN SEA LEVEL

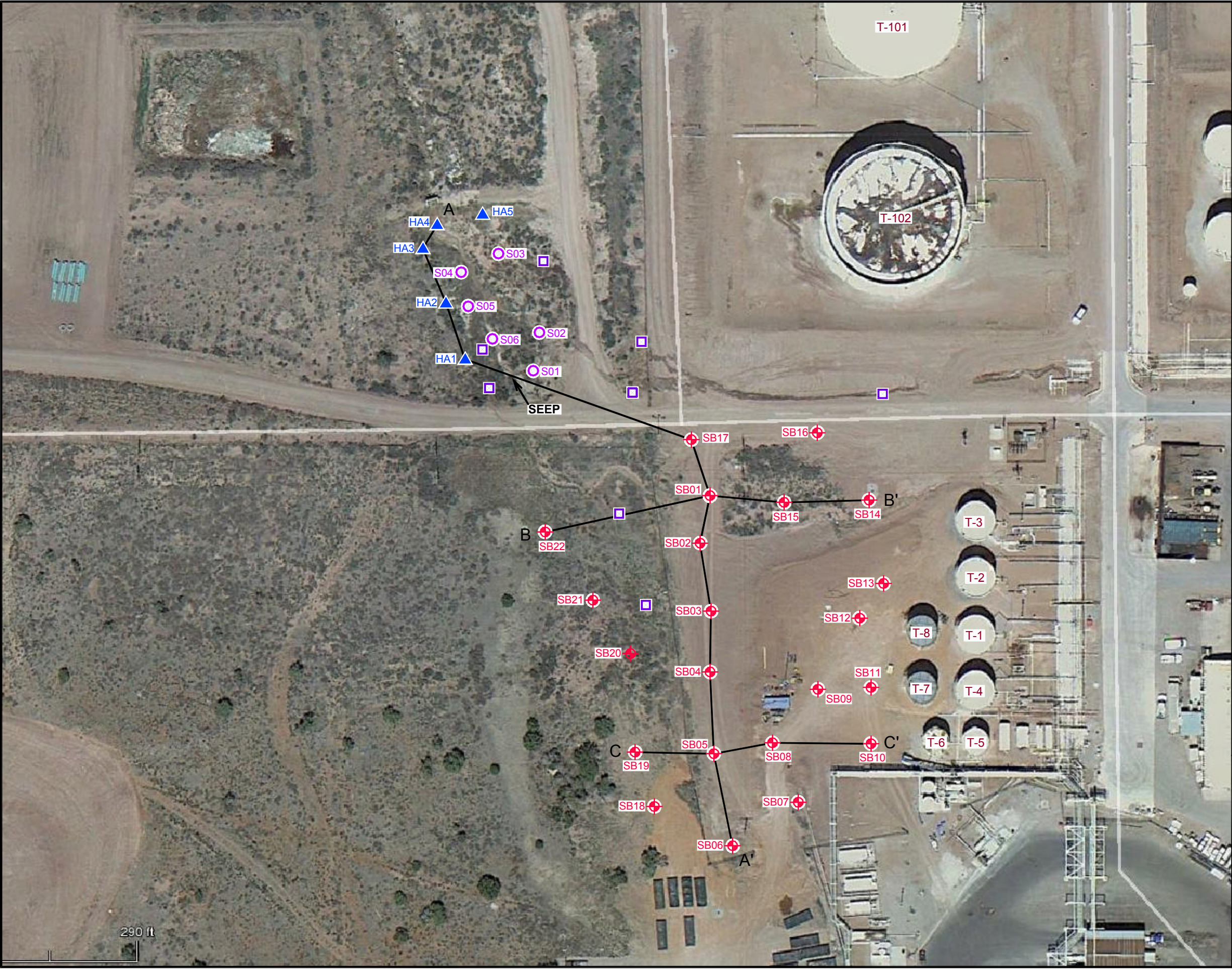


PROJ. NO.: Western Refining | DATE: 09/16/13 | FILE: WestRef-B174

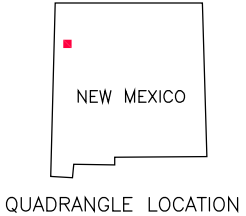
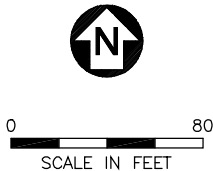
FIGURE 1
AREA WIDE POTENTIOMETRIC MAP
AUGUST 2013



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



Aerial Map Source: Google Map, 05/03/2012.



- LEGEND**
- SB01 SOIL BORING / TEMPORARY WELL LOCATION
 - HA1 HAND AUGER LOCATION
 - EXCAVATION LOCATION
 - S01 TEMPORARY SUMP
 - A — A' LINE OF CROSS-SECTION

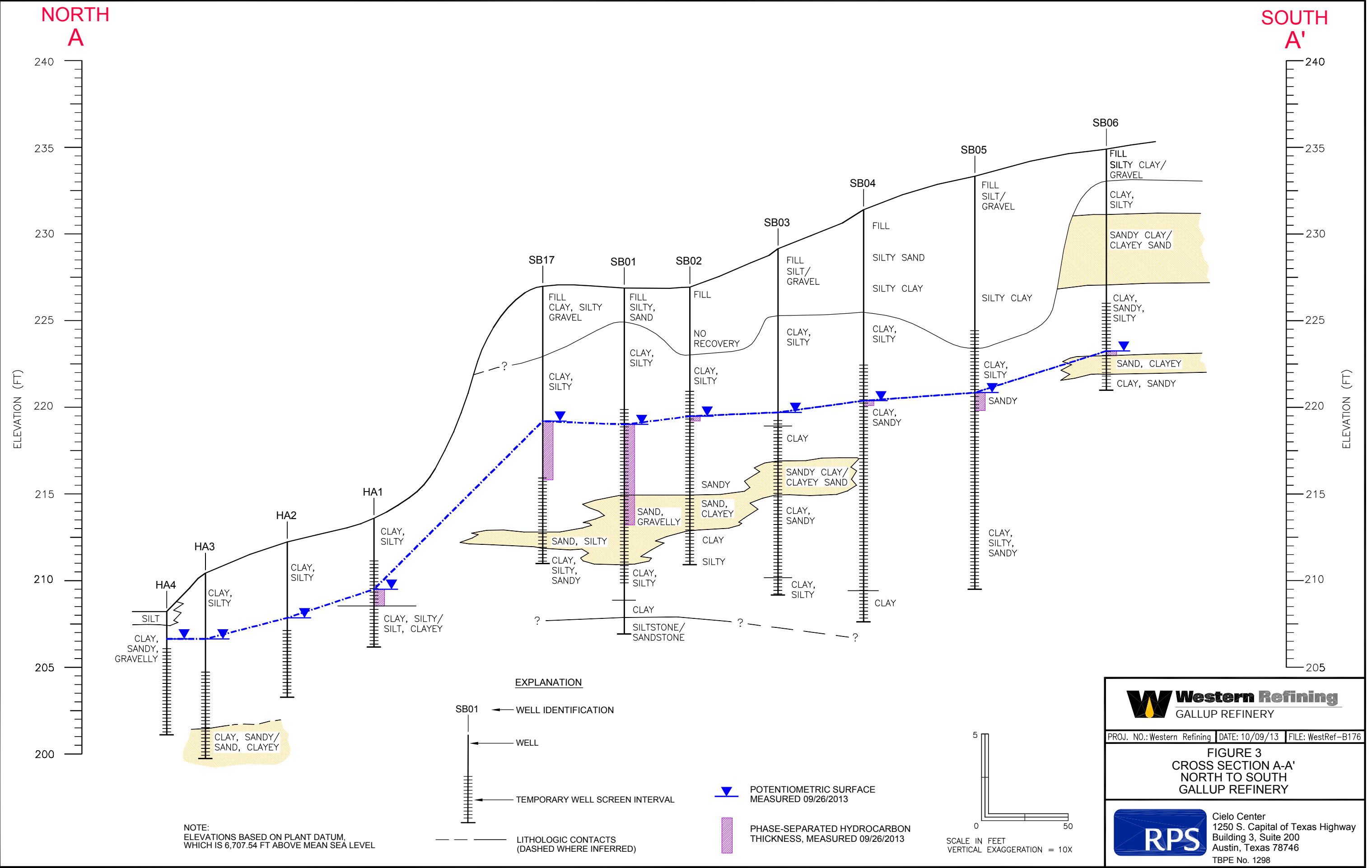


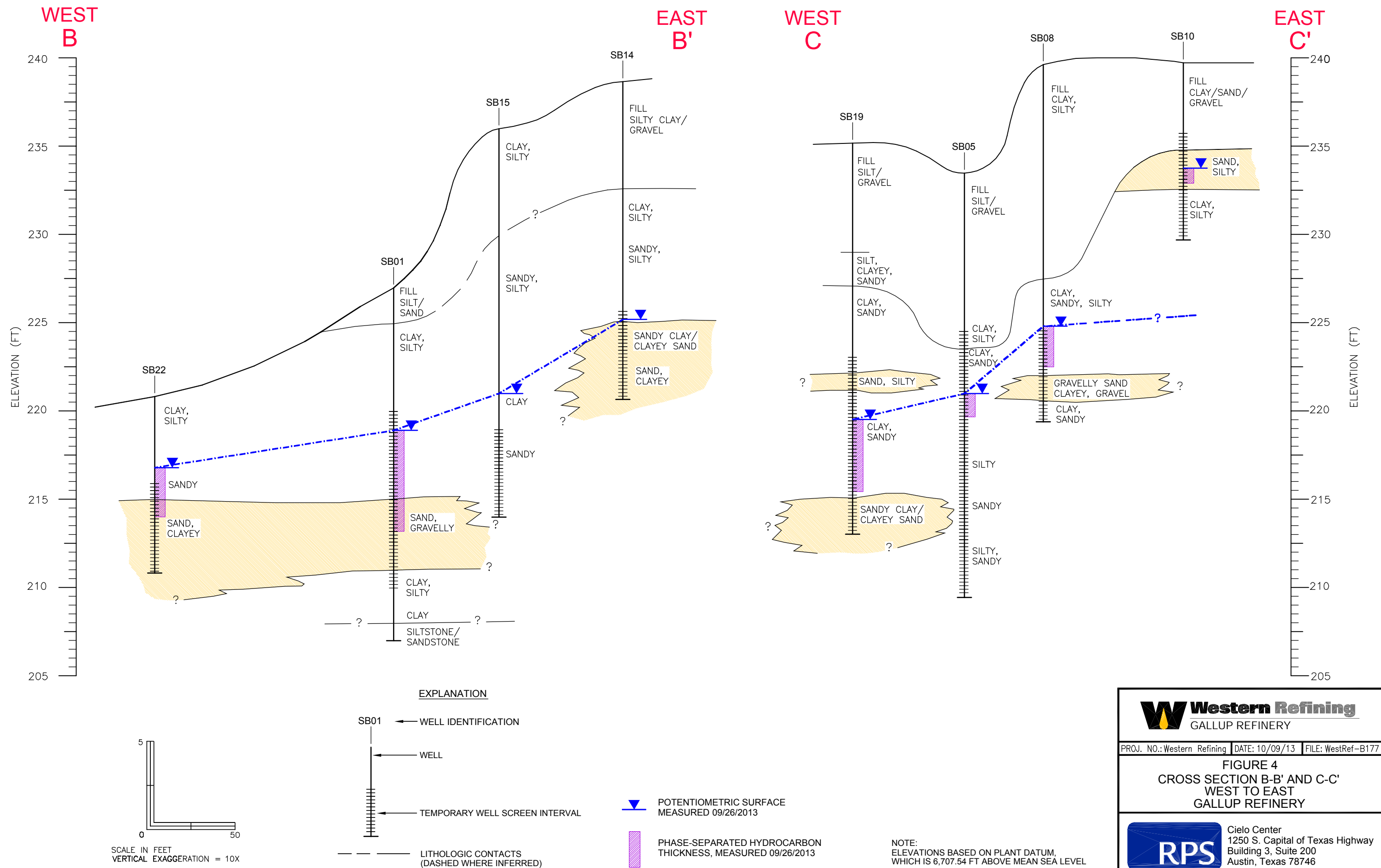
PROJ. NO.: Western Refining | DATE: 10/09/13 | FILE: WestRef-B175

FIGURE 2
CROSS-SECTION LOCATION MAP



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298





Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, October 17, 2013 9:24 AM
To: 'Larsen, Thurman'
Cc: VanHorn, Kristen, NMENV; Dawson, Scott, EMNRD; Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Powell, Brandon, EMNRD
Subject: RE: C-141 Final Marketing Tank #3 (MT-3 Cleanup and Remediation Project)

Beck:

OCD notices that you marked the C-141 Form "Final"; however, you did not provide any verification to the OCD based on analytical sampling data and photos of excavation to indicated remediation was completed.

Please send the information and/or send a response plan to the OCD for approval of an investigation with verification of remediation within 30 days of receipt of this message.

The refinery has been told that certain documentation is required (photos of excavation, analytical data from base of excavation and sidewalls, diagram to scale of contaminated area, etc. as proof or verification that the operator has completed response action(s) based on a spill or release.

Thank you.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive, Santa Fe, New Mexico 87505

Office: (505) 476-3490

E-mail: CarlJ.Chavez@State.NM.US

Website: <http://www.emnrd.state.nm.us/ocd/> "Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?" To see how, please go to: "Pollution Prevention & Waste Minimization" at <http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>

-----Original Message-----

From: Larsen, Thurman [<mailto:Thurman.Larsen@wnr.com>]
Sent: Wednesday, October 09, 2013 2:10 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Subject: C-141 Final Marketing Tank #3 (MT-3 Cleanup and Remediation Project)

Carl and Kristen,

Here is the Final C-141 for Marketing Tank #3 Cleanup and Remediation Project.

Thanks,
Beck

Chavez, Carl J, EMNRD

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Wednesday, October 09, 2013 2:10 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Subject: C-141 Final Marketing Tank #3 (MT-3 Cleanup and Remediation Project)
Attachments: C-141 Final 100913.pdf

Carl and Kristen,

Here is the Final C-141 for Marketing Tank #3 Cleanup and Remediation Project.

Thanks,
Beck

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: WESTERN REFINING	Contact: Beck Larsen	
Address: I-40 / EXIT 39, JAMESTOWN, NM 87347	Telephone No.(505) 722-0258	
Facility Name: WESTERN RENINING (GALLUP REFINERY)	Facility Type: Petroleum Refinery	
Surface Owner	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15 N	15 W					MCKINLEY

Latitude 35° 029' 024" Longitude 108° 024' 024"

NATURE OF RELEASE

Type of Release: 89 Base Unleaded Gasoline	Volume of Release: 100 bbls	Volume Recovered: 90 -97 bbls (Estimated)
Source of Release: Marketing Tank (T-3) Overflow	Date and Hour of Occurrence: 5/7/13 @ 0645 hrs	Date and Hour of Discovery: 5/07/13 @ 0648 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? (HWB-R. Horowitz (0715 msg), K Vanhorn (0718 msg)); (OCD -C Chavez (0726), Jonathan Kelly (0733))	
By Whom? Beck Larsen	Date and Hour: 5/07/13 0705 hrs	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

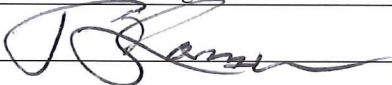
If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

At about 0648 Marketing Tank (MT-3) began to overflow with 89 Octane unleaded gasoline. The auto-fill was left in hand position and the high level alarm did not work causing the tank to overflow. Offsite personnel shut off the 89 Base Sales Pump at the Rail Rack and began cleanup. ERT members were dispatched at ~ 0700 hrs. Overflow stopped at 0710 hrs. Pump Truck was dispatched to disperse foam over the area. Onsite vacuum truck was dispatched to remove any excess liquid gasoline from area.

Describe Area Affected and Cleanup Action Taken.* Liquids were removed and initial samples were collected. Initial soil samples were collected and submitted to an outside laboratory for analysis. An outside contractor was called out in to scrap the contaminated affected area in several stages due to rain events. Confirmation samples were collected and submitted for analysis. On-site back-filled mater was spread to replace the contaminated material that was removed Remediated material was put in a roll-off for disposal. The project was finally concluded on October 8, 2013.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Beck Larsen:	Approved by Environmental Specialist:		
Title: Environmental Engineer	Approval Date:	Expiration Date:	
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/09/2013 Phone (505) 722-0258			

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Thursday, September 05, 2013 12:49 PM
To: VanHorn, Kristen, NMENV; Chavez, Carl J, EMNRD
Subject: Semi-annual Passive Bio-venting Progress Report #6 for 2013
Attachments: BIO-VENTING SA RPT #6 for 2013 FINAL.pdf; Transmittal of Soil Sampling Results for T-116 Diesel Release area.pdf

Dear Kristen and Carl,

The above attached report is for the Passive Bio-venting Progress Report #6 (2013) for the ULSD Soil Remediation in accordance with the NSR permit No. 0633-M8-R3 (Part A.214). If you should have any questions or comments, please contact me at (505) 722-0258.

Regards,

Beck Larsen
Environmental Engineer
Western Refining Southwest (Gallup Refinery)
Office: (505) 722-0258
cell: (505) 862-1749

September 5, 2013

New Mexico Environmental Department
Hazardous Waste Bureau (HWB)
1301 Siler Road, Building B
Santa Fe, New Mexico 87507
Attn: Ms. Kristen Van Horn

New Mexico Energy, Mineral, and Natural Resources
Oil Conservation Division (OCD)
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Attn: Mr. Carl Chavez

Re: Report #6
Semi-annual Report: Passive (Bio-ventilation) Project for Ultra Low Sulfur Diesel
(ULSD) Remediation in Accordance with NSR permit No. 0633-M8-R3, Part
A.214

Dear Ms. Van Horn and Mr. Chavez,

On October 16, 2010, Western Refining Company, L.P. (Western) – Gallup Refinery (“the facility”) was granted New Source Review (NSR) permit 0633-M8-R3 which, under Part A.214, allowed the installation of a passive bioremediation (bio-ventilation) system for the Ultra-Low Sulphur Diesel (ULSD) fuel spill that occurred at the facility on April 24, 2008. A total of 16 ventilation standpipes were installed in the spill area to a depth of 3 feet below ground surface (bgs)(Figure 1, Attachment 1).

The objective of the bio-ventilation system is to decrease the average volatile organic compound (VOC) concentration over time to a satisfactory standard. Western is required to submit semi-annual reports to the New Mexico Environmental Department and new Mexico Energy, Minerals, and Natural Resources Oil Conservation Division. This semi-annual report includes monitoring data and analytical results from January 1, 2013 through June 28, 2013 in order to meet the requirements of the NSR permit and provides a discussion to the effectiveness of the remediation system. This report includes the following attachments:

- Site Map (Figure 1, Attachment 1)

- VOC concentration trend graphs for the monitoring period for each standpipe (Figure 2, Attachment 1)
- Graph of average total VOC concentration vs. temperature for the monitoring period (Figure 3, Attachment 1)
- Bio-Ventilation Monitoring Log – contains current and historical total VOC measurements for each standpipe (Table 1, Attachment 2)
- Summary of analytical results from the soil sampling that was conducted in May 2013. (Table 2, Attachment 2)

Monitoring Schedule

During the initial stages of the project (December 2010 through January 2011), VOC monitoring was conducted on a bi-weekly basis to establish a baseline concentration. In February 2011, Western reduced the monitoring schedule to monthly and beginning July 2011, the monitoring schedule was further reduced to quarterly with occasional supplemental measurements to verify trends. Two monitoring events have been conducted thus far in 2013; on January 25, 2013 and June 28, 2013.

In addition to the vapor monitoring, Western conducted soil sampling in the Tank 116 Area in May 2013 to assess current levels of constituents of concern (COCs). The results were summarized in a report titled *“Transmittal of Soil Sampling Results for Tank 116 Diesel Release Area, Western Refining Company, LP Gallup, New Mexico Refinery”* submitted to NM-OCD on June 21, 2013. The results of the assessment are summarized below.

Vapor Monitoring Results

VOC measurements are collected quarterly from each of the ventilation standpipes. The VOC monitoring data are summarized on Table 1 (Attachment 2). Trend graphs were prepared from the data for each standpipe for the three-year monitoring period and are shown on Figure 2, (Attachment 1). The data show that VOC concentrations fluctuate over the three-year period. However, despite these fluctuations, the concentration trends for the majority of the standpipes show a downward trend suggesting an overall reduction in VOC concentrations in the vicinity of the standpipes.

To evaluate whether the variability in VOC concentrations is related to changes in ambient temperature, a graph was prepared that plots the average VOC concentration for all standpipes along with ambient temperature for each date over the three-year monitoring period (Figure 3, Attachment 1). No obvious correlation between temperature and VOC concentration was determined.

Results of Shallow Soil Sampling

Soil sampling was conducted in the Tank 116 study area on May 14 and 15, 2013 to assess current soil concentrations in the study area. Ten hand auger borings were conducted and soil samples were collected at 2 to 3 feet bgs. (immediately below the depth of excavation). The locations are shown on Figure 1 (Attachment 1). Samples were analyzed for total petroleum hydrocarbons-diesel range organics (TPH-DRO), BTEX, and semivolatile organic compounds (SVOCs). Analytical results are summarized on Table 2 (Attachment 2).

The data show that none of the detected VOC concentrations exceed regulatory standards. However, 7 of the 10 locations had reported TPH-DRO concentrations exceeded the NMED screening level for construction workers of 1,120 mg/Kg and three samples had reported concentrations of naphthalene exceeded the ground water protection (DAF 20) of 0.071 mg/Kg (Table 2). All other detected TPH and SVOCs were below the screening levels.

Conclusions

The majority of the trend graphs of VOC concentrations measurements from each of the standpipes show a downward trend. The data suggest that VOCs concentrations in the shallow soils should also be on the decline. Recent soil sampling in the area shows that VOC concentrations were below NMED screening levels; however, residual TPH and naphthalene concentrations are present that exceed screening levels. Western will continue to collect vapor concentration measurements on a quarterly basis.

Western appreciates the opportunity to submit this semi-annual report. Should you have any questions, please call me at 505-722-0258 or Mr. Scott Kirby with ERM at 251-706-8567.

Sincerely,

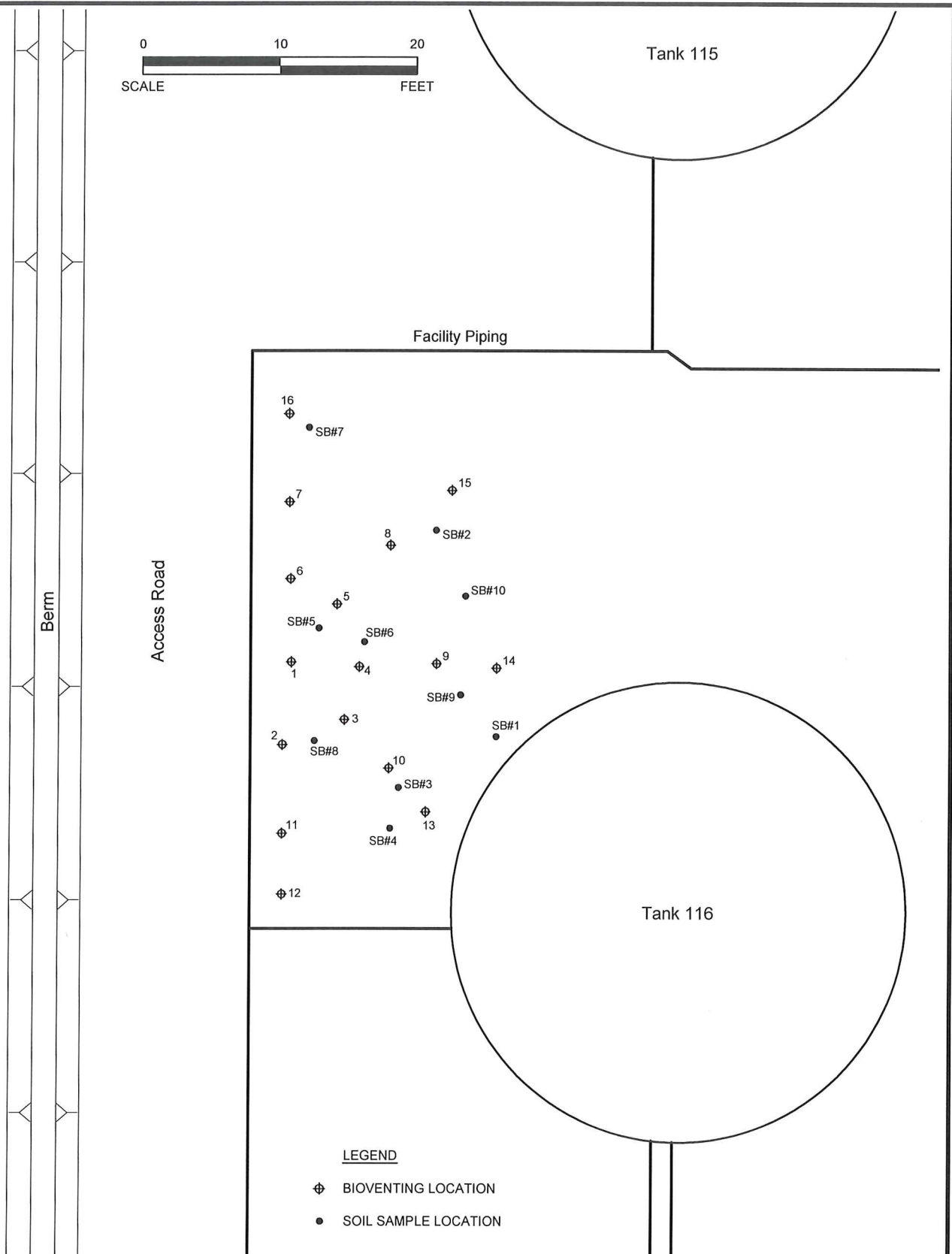
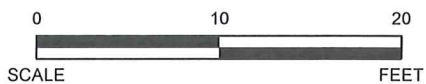


Beck Larsen, CHMM/REM/PG
Environmental Engineer
Western Refining Southwest

Direct Line: (505) 722-0258

E-mail: Thurman.larsen@wnr.com

*Attachment 1**Figures**September 5, 2013*



LEGEND

- ⊕ BIOVENTING LOCATION
- SOIL SAMPLE LOCATION

Environmental Resources Management

DESIGN: DLW	DRAWN: EFC	CHKD.:
DATE: 8/28/2013	SCALE: AS SHOWN	REV.:
W.O. NO.: H:\DWG\H13\0202127a002.dwg, 8/28/2013 10:10:36 AM		

Figure 1
Site Map
Tank 116 Diesel Spill Area
Western Refining - Gallup Refinery
Gallup, New Mexico



Figure 2

VOC Concentration Trend Graphs
Bio-Ventilation System Standpipes
Western Refining, L.P.
Gallup, New Mexico

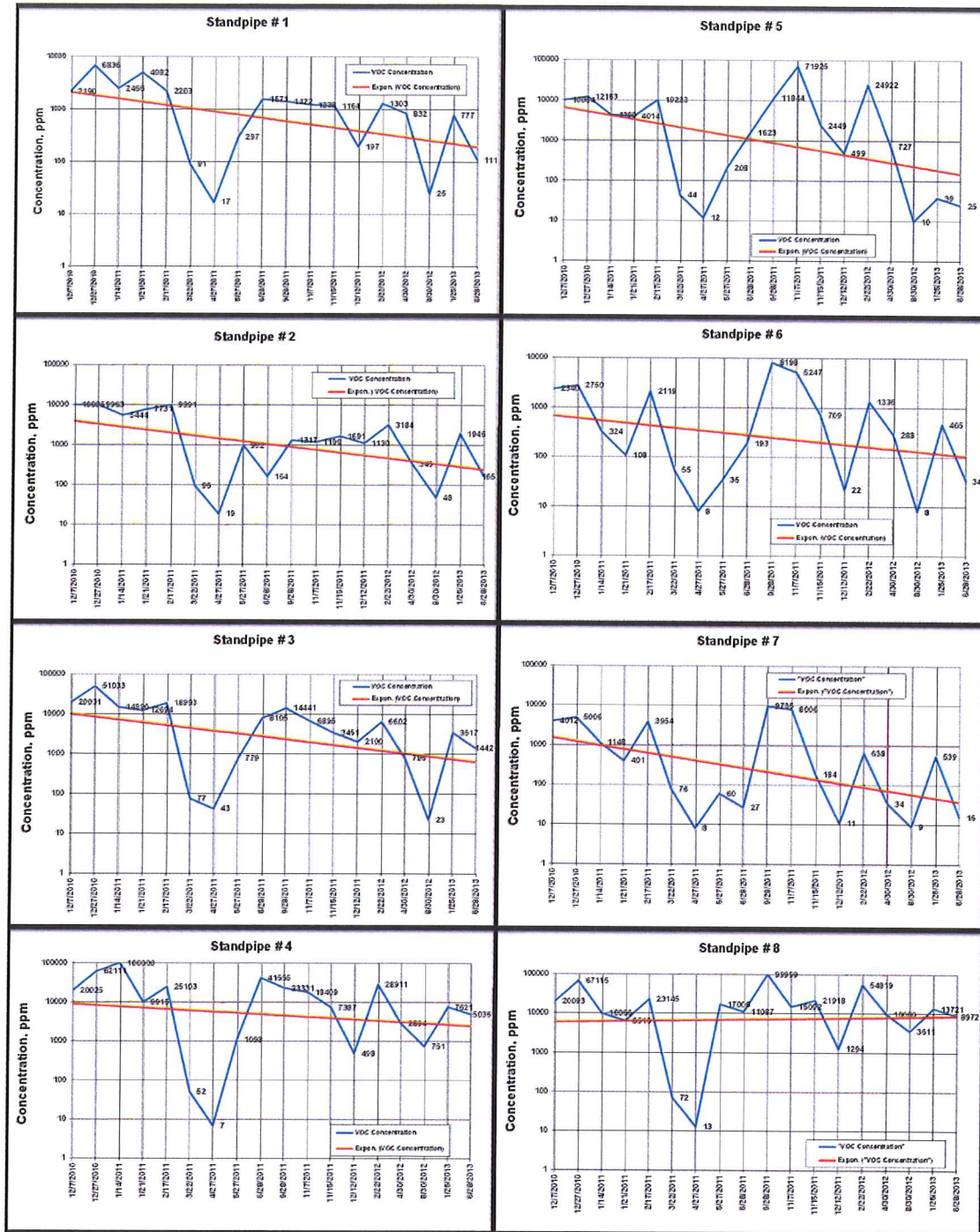


Figure 2

VOC Concentration Trend Graphs
Bio-Ventilation System Standpipes
Western Refining, L.P.
Gallup, New Mexico

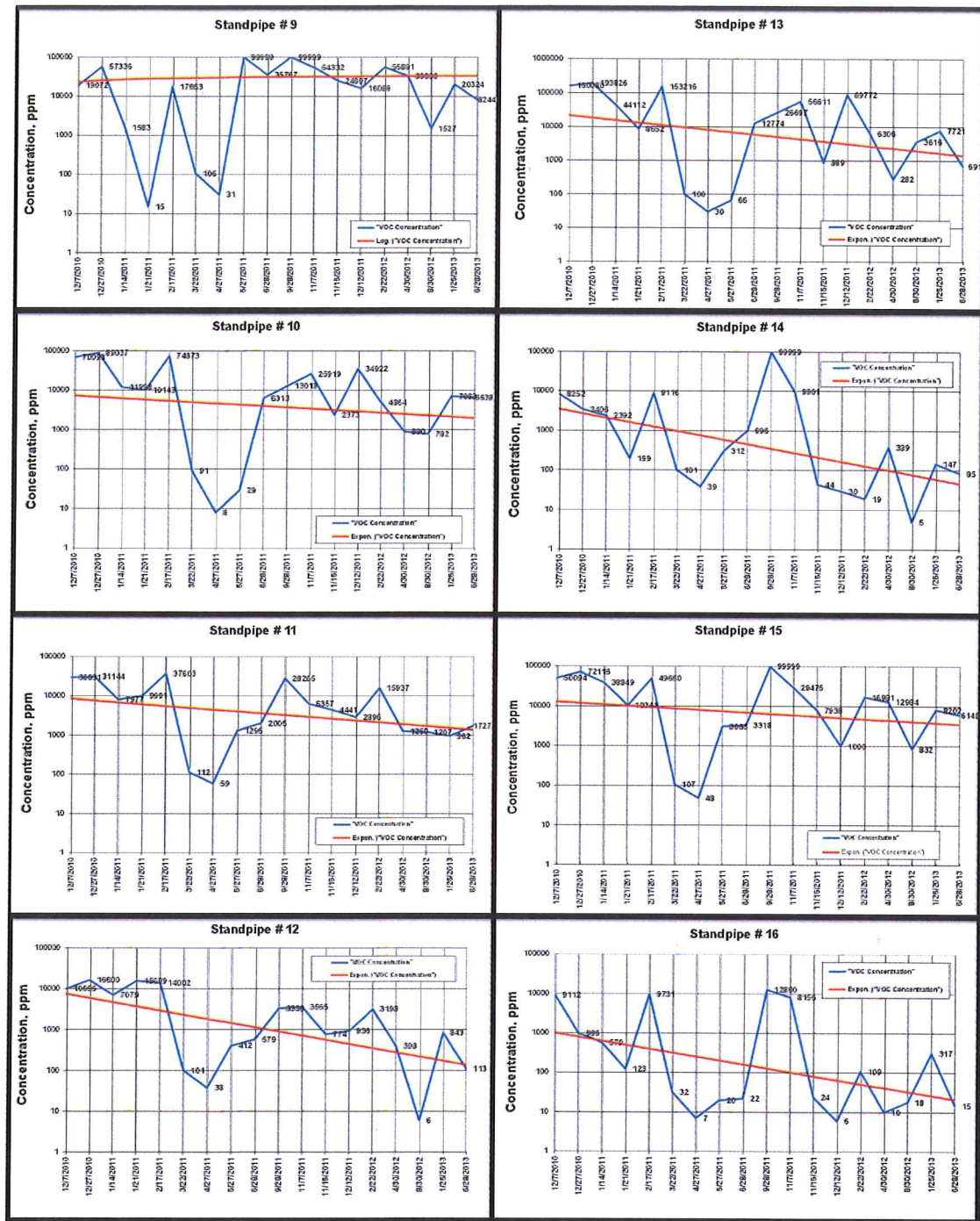
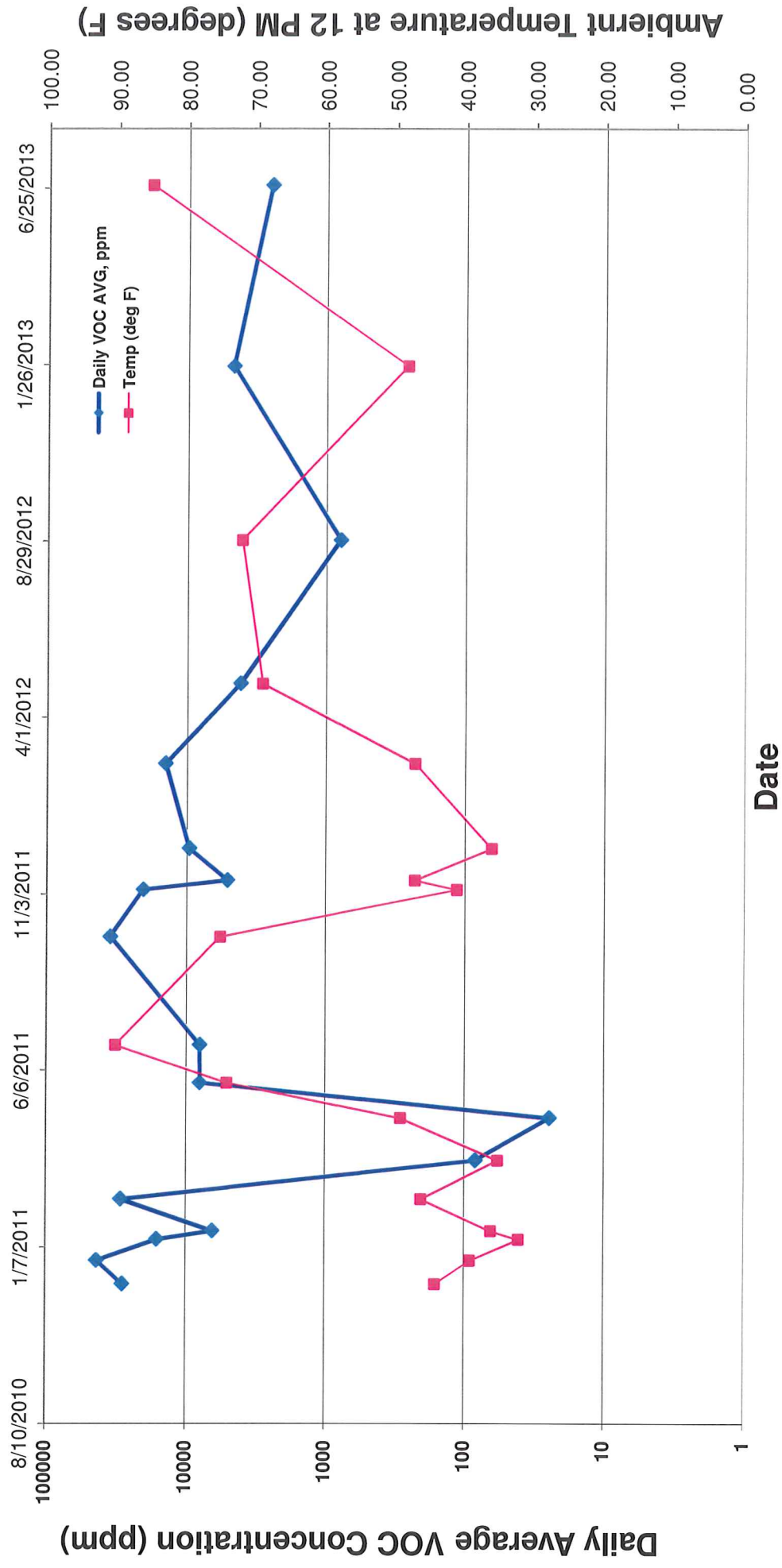


Figure 3
Daily Average VOC Concentration and Temperature versus Time



Attachment 2

Tables

September 5, 2013

Table 1

Bioventilation Monitoring Log

Map Location Number	Date:	READING (PPM)																AVERAGE
		12/27/2010																
		1/14/2011																
		2/17/2011																
Days from Start of Monitoring	0.00	20.00	6836	2466	4982	2203	91	17	297	1571	1422	1236	1164	197	1303	832	25	111
Ambient Temperature at 12 pm (deg F)	44.00	39.00	51033	14980	12694	18993	77	43	779	8105	14441	6895	3451	2100	6602	796	23	165
Precipitation during or within 2 days of sampling (in)	0.00	0.00	0.02	0.00	0.00	0.00	0.05	0.06	0.00	0.00	0.00	0.25	0.05	0.03	0.00	0.00	0.01	85.00
Tag #																		
C(1)	22723	2190	6836	2466	4982	2203	91	17	297	1571	1422	1236	1164	197	1303	832	25	111
C(2)	22724	10006	9963	5444	7731	1317	96	19	992	164	1317	1199	1691	1130	3184	340	48	1946
C(3)	22725	20031	51033	14980	12694	18993	77	43	779	8105	14441	6895	3451	2100	6602	796	23	1442
C(4)	22726	20025	62111	100000	9916	25103	52	7	1098	41555	23331	18409	7387	498	28911	2384	751	5036
C(5)	22727	10064	12163	4290	4014	10223	44	12	208	1623	11844	71925	2449	499	24922	727	10	39
C(6)	22728	2340	2750	324	108	2119	55	8	35	193	8198	5247	709	22	1336	288	8	34
C(7)	22729	4012	5006	1148	401	3954	76	8	60	27	9735	8006	184	11	638	34	9	16
C(8)	22730	20093	67115	10066	6510	23145	72	13	17006	11087	99999	15092	24837	1294	54919	10000	3611	8972
C(9)	22731	19072	57336	1583	15	17663	106	31	99999	35767	99999	54332	24897	16088	55881	33000	1527	8244
C(10)	22732	70093	89037	11998	10143	74873	91	8	29	6313	13018	25919	2373	34922	4864	890	782	7083
C(11)	22733	30031	31144	7977	9991	37603	112	59	1295	2005	28265	6357	4441	2896	15937	1260	1207	6639
C(12)	22734	10056	16600	7079	15699	14002	101	38	412	579	3338	3565	774	936	3198	398	6	1727
C(13)	22735	160080	193626	44112	8652	153216	100	30	66	12774	26697	56611	889	89772	6306	282	3616	119
C(14)	22736	8252	3406	2392	199	9116	101	39	312	996	99999	9901	44	30	19	389	5	691
C(15)	22737	50094	72116	38849	10341	49660	107	48	3065	3318	99999	29475	7938	1000	16981	12984	832	85
C(16)	22738	9112	986	579	123	9731	32	7	20	22	12860	8156	24	6	109	10	18	6148
OVERALL DAILY AVG (ppm)	27846.9	42589.3	15631.1	6344.9	2784.6	7891.2	2045.3	24	7854.6	9462.6	9462.6	14063.1	5020.8	9462.6	4070.3	4070.3	779.9	2340.4
DAILY GEOMETRIC AVG (ppm)	14556.1	19049.0	5555.3	2193.3	15377.6	1607.1	77.7	18.6	457.3	16310.3	10550.0	10550.0	1480.3	644.9	3897.3	748.6	101.5	2666.4
																		12922.5

Summary of Analytical Results
Coil Samples from Tank 116 Area
Western Refining Company, LP
Gallup, New Mexico

[illegible]

All concentrations in mg/Kg except where noted.

<0.022 - Constituent not detected above the method detection limit

J - Constituent detected below the practical limit of quantitation

- Concentration exceeds the New Mexico Environmental De...

- Concentration exceeds the NMED direct contact screening level for a construction worker

Screening levels based on NIMED Disk Assessment Guidelines for Children

Decreeing reversals based on NMED Risk Assessment Guidance for Site Investigations and Remediation Volume 1 (2006, revised 2012).

June 21, 2013

Mr. Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Project Number: 0202127

Environmental
Resources
Management

15810 Park Ten Place
Suite 300
Houston, Texas 77084-5140
(281) 600-1000
(281) 600-1001 (fax)

Subject: Transmittal of Soil Sampling Results for Tank 116 Diesel
Release Area, Western Refining Company, LP Gallup, New
Mexico Refinery

Dear Mr. Chavez,

On behalf of Western Refining Company, LP. (Western), Environmental Resources Management (ERM) has prepared this summary letter presenting the results of soil sampling conducted May 14 and 15, 2013 in the vicinity of Tank 116 at Western's Gallup, New Mexico refinery. The sampling was conducted in general accordance with the October 11, 2012 Remedial Action Sampling and Analysis Plan (SAP) submitted to the New Mexico Oil Conservation Commission (NM-OCD).



Background

On April 24, 2008, approximately 1,890 gallons of Ultra Low Sulphur Diesel was released from Tank 116 in the North Tank Farm of the Gallup Refinery. Soils within the tank containment area and an adjacent service road were impacted by the release. Free liquids were removed by vacuum truck and sorbent material. Affected soils within the containment were excavated to a depth of approximately 2 feet below grade (Figure 1). On the roadway, which is partially paved, approximately 3-inches of soil were removed. Excavated soil was disposed of in a permitted landfill. Composite soil samples were collected from the excavation area and the excavations were backfilled with clean soil. Laboratory results for the initial soil samples (collected in 2008) are provided on Table 1.

Following the initial spill response, Western installed a passive bio-venting system as the remedy for the remaining soil. The biovents are constructed using a perforated vent pipe installed to a depth of 3 feet below grade. The first biovent was installed in mid-2008 and an evaluation sample was collected adjacent to the vent approximately one-year later. The results of that evaluation sample indicated lower concentrations (Table 1). Based on that analysis, 15 additional vent pipes were installed in December 2010 in a radial array as illustrated in Figure 2. The bio-ventilation system is operated under NSR Permit 0633-M8-R3. Volatile organic concentrations have been periodically monitored from the array and reported to the NM-OCD. Over the past four years, monitoring of the vents indicated an overall decrease in vapor concentrations. Based on those observations, Western elected to conduct additional soil sampling to further assess the effectiveness of the bio-venting.

Field Activities

Following the approach described in the SAP, the known area of affected soil was gridded and eight soil sample locations were selected at random. Based on the distribution of the randomly selected sample locations, two additional locations were added to fill gaps in the areas to be assessed (Figure 2). Soil borings were conducted at each of these locations using a hand auger. Soil samples were collected for laboratory analysis from 2 to 3 feet below grade (i.e., just beneath the depth of prior excavation).

Samples were collected in laboratory-supplied sample containers for analysis of volatile organic constituents (VOCs), semivolatile organic constituents (SVOCs), and diesel-range organics (TPH-DRO). Excess soil cuttings were placed in a 55-gallon drum for disposal by Western.

Once filled, sample containers were immediately placed in an ice-filled cooler. Samples were shipped by overnight courier to ALS Laboratories of Houston, Texas for analysis. Laboratory results are summarized in Table 2. The full laboratory report is provided as Attachment 1.

According to the laboratory data, reported TPH-DRO concentrations exceed the NMED screening level for construction workers of 1,120 mg/Kg at 7 of the 10 locations (Table 2). In addition, three of the samples had reported concentrations of naphthalene that exceeded ground water protection (DAF 20) of 0.071 mg/Kg. All other detected concentrations of VOCs and SVOCs were below screening levels.

Sincerely,

Environmental Resources Management



Donald L. Whitley, P.G.
Project Manager

cc: Thurman Larsen, Western Refining Company LP
Reif Hedgcoxe, Environmental Resources Management (Houston)
Scott Kirby, Environmental Resources Management (Mobile)

Tables

June 21, 2013
Project No. 0202127

Environmental Resources Management

15810 Park Ten Place, Suite 300

Houston, Texas 77084-5140

(281) 600-1000

Table 1

**Summary of Analytical Results
Historical Soil Samples from Tank 116 Area
Western Refining Company, LP
Gallup, New Mexico**

		0806295-01	0806295-02	0806295-03	0806295-04	0907508-02
		6/17/2008	6/17/2008	6/17/2008	6/17/2008	7/16/2009
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyses						
TPH-DRO	1,120	3,100	4,100	4,700	5,200	250
TPH-MRO	----	ND	ND	ND	ND	250
TPH-GRO	----	ND	ND	ND	ND	NA
MTBE	4,690	ND	ND	ND	ND	NA
Benzene	85	ND	ND	ND	ND	NA
Toluene	57,900	ND	ND	ND	ND	NA
Ethylbenzene	385	ND	ND	ND	ND	NA
Xylenes, Total	3,610	ND	ND	ND	ND	NA

NOTES:

ND - Constituent not detected above the laboratory reporting limit

NA - Sample not analyzed for this constituent

 - Concentration exceeds the NMED Direct Contact Screening Level

Table 2

**Summary of Analytical Results
Soil Samples from Tank 116 Area
Western Refining Company, LP
Gallup, New Mexico**

Volatile Organic Constituents (VOCs)	NMED Soil Screening Levels (Construction)	NMED Soil Screening Levels (DAF of 20) Ground Water Protection	SB#1 (2'-3')		SB#2 (2'-3')		SB#3 (2'-3')		SB#4 (2'-3')		SB#5 (2'-3')		SB#6 (2'-3')		SB#7 (2'-3')	
			05/14/2013	05/15/2013	05/14/2013	05/15/2013	05/14/2013	05/15/2013	05/14/2013	05/15/2013	05/14/2013	05/15/2013	05/14/2013	05/15/2013	05/14/2013	05/15/2013
Benzene	138	0.035	<0.00070	U	<0.00073	U	<0.00069	U	0.0043	J	<0.00064	U	<0.00075	U	<0.00065	U
Ethylbenzene	1,830	0.3	<0.0011	U	<0.0011	U	<0.0010	U	0.13		<0.00097	U	<0.0011	U	<0.00098	U
Isopropylbenzene	2,810	17.3	<0.0012	U	<0.0012	U	<0.0011	U	0.14		<0.0011	U	<0.0012	U	<0.0011	U
m,p-Xylene	705	3.1	<0.0020	U	<0.0021	U	<0.0019	U	1.7		<0.0018	U	0.006	J	<0.0018	U
o-Xylene	823	3.13	<0.0012	U	0.054		<0.0011	U	0.93		<0.0011	U	0.016		<0.0011	U
Toluene	13,400	25.3	<0.00082	U	<0.00085	U	<0.00080	U	0.0069		<0.00075	U	<0.00087	U	<0.00076	U
Xylenes, Total	743	3.13	<0.0020	U	0.054		<0.0019	U	2.6		<0.0018	U	0.022		<0.0018	U
TPH - Diesel Range Organics																
DRO (>C10 - C28)	1,120		3,900		5,500		3,300		6,300		2,800		140		3,600	
Semivolatile Organic Compounds (SVOCs)																
Acenaphthene	18,600	338	<0.23	U	3.8		<0.23	U	<0.22	U	<0.21	U	<0.25	U	<0.22	U
Anthracene	66,800	5,410	<0.23	U	1.6	J	<0.23	U	<0.22	U	<0.21	U	<0.25	U	<0.22	U
Fluoranthene	8,910	2,430	<0.23	U	<0.24	U	1.6	J	<0.22	U	<0.21	U	<0.25	U	<0.22	U
Fluorene	8,910	406	<0.23	U	4.9		<0.23	U	<0.22	U	<0.21	U	<0.25	U	<0.22	U
Naphthalene	158	0.071	<0.23	U	0.93	J	<0.23	U	2.7		<0.21	U	<0.25	U	<0.22	U
Phenanthrene	7,150	571	0.39	J	6.9		<0.23	U	0.89	J	<0.21	U	<0.25	U	<0.22	U
Pyrene	6,680	1,790	<0.23	U	2.1		1.0	J	<0.22	U	<0.21	U	<0.25	U	0.94	J
Percent Moisture (Wt. %)			14.8		17.3		12.5		9.72		6.9		19.6		8.09	
TPH - Diesel Range Organics																
DRO (>C10 - C28)	1,120		650		1,500		730		2,900				<0.51	U		
Semivolatile Organic Compounds (SVOCs)																
Acenaphthene	18,600	338	<0.022	U	<0.024	U	2.0		<0.022	U			<0.020	U		
Anthracene	66,800	5,410	<0.022	U	<0.024	U	0.87	J	<0.022	U			<0.020	U		
Fluoranthene	8,910	2,430	<0.022	U	<0.024	U	0.41	J	<0.022	U			<0.020	U		
Fluorene	8,910	406	<0.022	U	<0.024	U	<0.22	U	<0.022	U			<0.020	U		
Naphthalene	158	0.071	<0.022	U	<0.024	U	1.5	J	<0.022	U			<0.020	U		
Phenanthrene	7,150	571	<0.022	U	0.066	J	8.0		<0.022	U			<0.020	U		
Pyrene	6,680	1,790	<0.022	U	0.068	J	1.3	J	<0.022	U			<0.020	U		
Percent Moisture (Wt. %)			9.67		15.9		9.67		9.61				1.43			

NOTES:

All concentrations in mg/Kg except where noted.

<0.022 - Constituent not detected above the method detection limit

J - Constituent detected below the practical limit of quantitation

- Concentration exceeds the New Mexico Environmental Department (NMED) screening level for ground water protection (DAF 20)

- Concentration exceeds the NMED direct contact screening level for a construction worker.

Screening levels based on NMED Risk Assessment Guidance for Site Investigations and Remediation Volume 1 (2006, revised 2012).

Figures

June 21, 2013
Project No. 0202127

Environmental Resources Management

15810 Park Ten Place, Suite 300
Houston, Texas 77084-5140
(281) 600-1000



Berm

CS-0806295-03

CS-0907508-02

Access Road

CS-0806295-01

Tank 115

Approximate Excavation Areas

CS-0806295-02

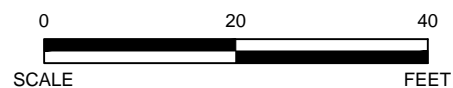
CS-0806295-04

Tank 116

Facility Piping

LEGEND

■ COMPOSITE SAMPLE LOCATION

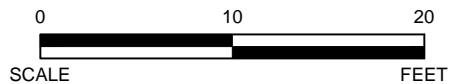


Environmental Resources Management

DESIGN: DLW	DRAWN: EFC	CHKD.:
DATE: 6/5/2013	SCALE: AS SHOWN	REV.:
W.O. NO.: H:\DWG\F13\0202127a001.dwg, 6/5/2013 10:23:30 AM		

Figure 1
Historical Sample Locations and Excavation Areas
Tank 116 Diesel Spill Area
Western Refining - Gallup Refinery
Gallup, New Mexico





Berm

Access Road

Facility Piping

Tank 115

Tank 116

LEGEND

- ⊕ BIOVENTING LOCATION
- SOIL SAMPLE LOCATION

Environmental Resources Management

DESIGN: DLW	DRAWN: EFC	CHKD.:
DATE: 6/5/2013	SCALE: AS SHOWN	REV.:
W.O. NO.: H:\DWG\F13\0202127a002.dwg, 6/5/2013 11:00:02 AM		

Figure 2
Soil Sample Locations - May 2013 Samples
Tank 116 Diesel Spill Area
Western Refining - Gallup Refinery
Gallup, New Mexico



Laboratory Reports
Attachment 1

June 21, 2013
Project No. 0202127

Environmental Resources Management
15810 Park Ten Place, Suite 300
Houston, Texas 77084-5140
(281) 600-1000



23-May-2013

Don Whitley
Environmental Resources Management
15810 Park Ten Place
Suite 300
Houston, TX 77084

Tel: (281) 600-1084
Fax: (281) 600-1001

Re: Gallup NM # PN 0097134

Work Order: **1305777**

Dear Don,

ALS Environmental received 16 samples on 17-May-2013 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 60.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in cursive script, reading "Bernadette Fini".

Electronically approved by: Dayna.Fisher

Bernadette A. Fini
Project Manager



Certificate No: TX: T104704231-13-11

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Work Order: 1305777

**TRRP Laboratory Data
Package Cover Page**

This data package consists of all or some of the following as applicable:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits.
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.
The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Work Order: 1305777

**TRRP Laboratory Data
Package Cover Page**

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory have been identified by the laboratory in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [NA] This laboratory meets an exception under 30 TAC §25.6 and was last inspected by [] TCEQ or [] _____ on (enter date of last inspection). Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Bernadette A. Fini

Bernadette A. Fini
Project Manager

Laboratory Review Checklist: Reportable Data								
Laboratory Name: ALS Laboratory Group					LRC Date: 05/23/2013			
Project Name: Gallup NM # PN 0097134					Laboratory Job Number: 1305777			
Reviewer Name: Bernadette Fini					Prep Batch Number(s): 70112A,70114,70124,R147609,R147658,R147725,R147733			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER ⁵	
R1	OI	Chain-of-custody (C-O-C)						
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X					
		Were all departures from standard conditions described in an exception report?	X					
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X					
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X					
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times?	X					
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X					
		Were calculations checked by a peer or supervisor?	X					
		Were all analyte identifications checked by a peer or supervisor?	X					
		Were sample detection limits reported for all analytes not detected?	X					
		Were all results for soil and sediment samples reported on a dry weight basis?	X					
		Were % moisture (or solids) reported for all soil and sediment samples?	X					
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X			
		If required for the project, TICs reported?			X			
R4	O	Surrogate recovery data						
		Were surrogates added prior to extraction?	X					
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1	
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?	X					
		Were blanks analyzed at the appropriate frequency?	X					
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X					
		Were blank concentrations < MQL?	X					
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?	X					
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X					
		Were LCSs analyzed at the required frequency?	X					
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X					
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X					
		Was the LCSD RPD within QC limits?	X					
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
		Were the project/method specified analytes included in the MS and MSD?	X					
		Were MS/MSD analyzed at the appropriate frequency?	X					
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2	
		Were MS/MSD RPDs within laboratory QC limits?	X					
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each matrix?	X					
		Were analytical duplicates analyzed at the appropriate frequency?	X					
		Were RPDs or relative standard deviations within the laboratory QC limits?	X					
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the laboratory data package?	X					
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X					
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X					
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X					
		Were all necessary corrective actions performed for the reported data?	X					
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X					
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X					

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group				LRC Date: 05/23/2013			
Project Name: Gallup NM # PN 0097134				Laboratory Job Number: 1305777			
Reviewer Name: Bernadette Fini				Prep Batch Number(s): 70112A,70114,70124,R147609,R147658,R147725,R147733			
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Reportable Data	
Laboratory Name: ALS Laboratory Group	LRC Date: 05/23/2013
Project Name: Gallup NM # PN 0097134	Laboratory Job Number: 1305777
Reviewer Name: Bernadette Fini	Prep Batch Number(s): 70112A,70114,70124,R147609,R147658,R147725,R147733
ER# ⁵	Description
1	<p>TPH (DRO) – 8015C, Surrogate 2-Fluorobiphenyl recoveries were diluted out in the 100X dilution for various samples.</p> <p>Semivolatile Organics Method 8270, Surrogate: 2, 4, 6-Tribromophenol, Nitrobenzene-d5, and 2-Fluorobiphenyl recoveries were above the control limits for various samples. Results confirmed as matrix interference by re-analysis.</p>
2	<p>Batch 70112A, TPH (DRO) 8015C, Sample SB#11 (2' – 3'): MS/MSD recoveries were outside the control limits for DRO (>C10 – C28) due to high concentration to the background sample. Results are flagged with an O. The associated LCS recoveries and MS/MSD RPD were within the control limits.</p> <p>Batch 70124, TPH (DRO) 8015C, Sample SB#4 (2' – 3'): MS/MSD recoveries were outside the control limits for DRO (>C10 – C28) due to high concentration to the background sample. Results are flagged with an O. The associated LCS recoveries and MS/MSD RPD were within the control limits.</p> <p>Batch R147609, Volatile Organics 8260, Sample SB#1 (2' – 3'): MS/MSD recoveries were outside the control limits for several analytes. The associated LCS recoveries and MS/MSD RPD were within the control limits.</p> <p>Batch R147658, Volatile Organics 8260, Sample 1305709-13: MS/MSD is for an unrelated sample.</p>
<p>Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.</p> <p>O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);</p> <p>NA = Not Applicable;</p> <p>NR = Not Reviewed;</p> <p>R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).</p>	

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Work Order: 1305777

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305777-01	SB#1 (2'-3')	Soil		5/14/2013 07:50	5/17/2013 09:00	<input type="checkbox"/>
1305777-02	SB#11 (2'-3')	Soil		5/14/2013 15:00	5/17/2013 09:00	<input type="checkbox"/>
1305777-03	SB#5 (2'-3')	Soil		5/14/2013 08:20	5/17/2013 09:00	<input type="checkbox"/>
1305777-04	SB#5 (4'-5')	Soil		5/14/2013 08:35	5/17/2013 09:00	<input checked="" type="checkbox"/>
1305777-05	SB#8 (2'-3')	Soil		5/14/2013 09:05	5/17/2013 09:00	<input type="checkbox"/>
1305777-06	SB#8 (4'-5')	Soil		5/14/2013 09:09	5/17/2013 09:00	<input checked="" type="checkbox"/>
1305777-07	SB#6 (2'-3')	Soil		5/14/2013 09:25	5/17/2013 09:00	<input type="checkbox"/>
1305777-08	SB#9 (2'-3')	Soil		5/14/2013 09:55	5/17/2013 09:00	<input type="checkbox"/>
1305777-09	SB#3 (2'-3')	Soil		5/14/2013 13:15	5/17/2013 09:00	<input type="checkbox"/>
1305777-10	SB#2 (2'-3')	Soil		5/15/2013 07:50	5/17/2013 09:00	<input type="checkbox"/>
1305777-11	SB#2 (4'-5')	Soil		5/15/2013 08:30	5/17/2013 09:00	<input checked="" type="checkbox"/>
1305777-12	Equipment Blank	Soil		5/15/2013 08:40	5/17/2013 09:00	<input type="checkbox"/>
1305777-13	SB#7 (2'-3')	Soil		5/15/2013 09:35	5/17/2013 09:00	<input type="checkbox"/>
1305777-14	SB#10 (2'-3')	Soil		5/15/2013 10:25	5/17/2013 09:00	<input type="checkbox"/>
1305777-15	SB#4 (2'-3')	Soil		5/15/2013 11:19	5/17/2013 09:00	<input type="checkbox"/>
1305777-16	Trip Blank - Soil	Soil		5/14/2013	5/17/2013 09:00	<input type="checkbox"/>

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#1 (2'-3')
Collection Date: 5/14/2013 07:50 AM

Work Order: 1305777
Lab ID: 1305777-01
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C			Method:SW8015M			Analyst: RPM	
DRO (>C10 - C28)	3,900		59	200	mg/Kg-dry	100	5/21/2013 17:00
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	100	5/21/2013 17:00
SEMIVOLATILES			Method:SW8270			Prep: SW3541 / 5/20/13	
						Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
2,4,6-Trichlorophenol	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
2,4-Dichlorophenol	U		0.29	2.0	mg/Kg-dry	10	5/22/2013 14:39
2,4-Dimethylphenol	U		0.41	2.0	mg/Kg-dry	10	5/22/2013 14:39
2,4-Dinitrophenol	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
2-Chlorophenol	U		0.72	2.0	mg/Kg-dry	10	5/22/2013 14:39
Acenaphthene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Anthracene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Benz(a)anthracene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Benzo(a)pyrene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Benzo(b)fluoranthene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Benzo(k)fluoranthene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Chrysene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Dibenz(a,h)anthracene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Fluoranthene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Fluorene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Naphthalene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Nitrobenzene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Pentachlorophenol	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Phenanthrene	0.39	J	0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Phenol	U		0.81	2.0	mg/Kg-dry	10	5/22/2013 14:39
Pyrene	U		0.23	2.0	mg/Kg-dry	10	5/22/2013 14:39
Surr: 2,4,6-Tribromophenol	216	S		36-126	%REC	10	5/22/2013 14:39
Surr: 2-Fluorobiphenyl	111			43-125	%REC	10	5/22/2013 14:39
Surr: 2-Fluorophenol	77.8			37-125	%REC	10	5/22/2013 14:39
Surr: 4-Terphenyl-d14	115			32-125	%REC	10	5/22/2013 14:39
Surr: Nitrobenzene-d5	146	S		37-125	%REC	10	5/22/2013 14:39
Surr: Phenol-d6	91.6			40-125	%REC	10	5/22/2013 14:39
VOLATILES - SW8260C			Method:SW8260			Analyst: WLR	
Benzene	U		0.00070	0.0059	mg/Kg-dry	1	5/20/2013 11:26
Ethylbenzene	U		0.0011	0.0059	mg/Kg-dry	1	5/20/2013 11:26
Isopropylbenzene	U		0.0012	0.0059	mg/Kg-dry	1	5/20/2013 11:26
m,p-Xylene	U		0.0020	0.012	mg/Kg-dry	1	5/20/2013 11:26
o-Xylene	U		0.0012	0.0059	mg/Kg-dry	1	5/20/2013 11:26

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#1 (2'-3')
Collection Date: 5/14/2013 07:50 AM

Work Order: 1305777
Lab ID: 1305777-01
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00070	0.0059	mg/Kg-dry	1	5/20/2013 11:26
Toluene	U		0.00082	0.0059	mg/Kg-dry	1	5/20/2013 11:26
Xylenes, Total	U		0.0020	0.012	mg/Kg-dry	1	5/20/2013 11:26
Surr: 1,2-Dichloroethane-d4	95.6			70-128	%REC	1	5/20/2013 11:26
Surr: 4-Bromofluorobenzene	86.2			73-126	%REC	1	5/20/2013 11:26
Surr: Dibromofluoromethane	97.8			71-128	%REC	1	5/20/2013 11:26
Surr: Toluene-d8	102			73-127	%REC	1	5/20/2013 11:26
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	14.8		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#11 (2'-3')
Collection Date: 5/14/2013 03:00 PM

Work Order: 1305777
Lab ID: 1305777-02
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C			Method:SW8015M			Analyst: RPM	
DRO (>C10 - C28)	2,900		55	190	mg/Kg-dry	100	5/21/2013 17:24
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	100	5/21/2013 17:24
SEMIVOLATILES			Method:SW8270			Prep: SW3541 / 5/20/13 Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
2,4,6-Trichlorophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
2,4-Dichlorophenol	U		0.028	0.18	mg/Kg-dry	1	5/21/2013 18:49
2,4-Dimethylphenol	U		0.039	0.18	mg/Kg-dry	1	5/21/2013 18:49
2,4-Dinitrophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
2-Chlorophenol	U		0.069	0.18	mg/Kg-dry	1	5/21/2013 18:49
Acenaphthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Anthracene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Benz(a)anthracene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Benzo(a)pyrene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Benzo(b)fluoranthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Benzo(k)fluoranthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Chrysene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Dibenz(a,h)anthracene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Fluoranthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Fluorene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Naphthalene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Nitrobenzene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Pentachlorophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Phenanthrene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Phenol	U		0.076	0.18	mg/Kg-dry	1	5/21/2013 18:49
Pyrene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 18:49
Surr: 2,4,6-Tribromophenol	73.7			36-126	%REC	1	5/21/2013 18:49
Surr: 2-Fluorobiphenyl	61.6			43-125	%REC	1	5/21/2013 18:49
Surr: 2-Fluorophenol	49.5			37-125	%REC	1	5/21/2013 18:49
Surr: 4-Terphenyl-d14	60.7			32-125	%REC	1	5/21/2013 18:49
Surr: Nitrobenzene-d5	59.9			37-125	%REC	1	5/21/2013 18:49
Surr: Phenol-d6	56.4			40-125	%REC	1	5/21/2013 18:49
VOLATILES - SW8260C			Method:SW8260			Analyst: WLR	
Benzene	U		0.00066	0.0055	mg/Kg-dry	1	5/20/2013 11:50
Ethylbenzene	U		0.0010	0.0055	mg/Kg-dry	1	5/20/2013 11:50
Isopropylbenzene	U		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 11:50
m,p-Xylene	U		0.0019	0.011	mg/Kg-dry	1	5/20/2013 11:50
o-Xylene	U		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 11:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#11 (2'-3')
Collection Date: 5/14/2013 03:00 PM

Work Order: 1305777
Lab ID: 1305777-02
Matrix: SOIL

Analyses	Result	Qual	SDL	SQL	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00066	0.0055	mg/Kg-dry	1	5/20/2013 11:50
Toluene	U		0.00077	0.0055	mg/Kg-dry	1	5/20/2013 11:50
Xylenes, Total	U		0.0019	0.011	mg/Kg-dry	1	5/20/2013 11:50
Surr: 1,2-Dichloroethane-d4	89.1			70-128	%REC	1	5/20/2013 11:50
Surr: 4-Bromofluorobenzene	80.3			73-126	%REC	1	5/20/2013 11:50
Surr: Dibromofluoromethane	94.7			71-128	%REC	1	5/20/2013 11:50
Surr: Toluene-d8	107			73-127	%REC	1	5/20/2013 11:50
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	9.61		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#5 (2'-3')
Collection Date: 5/14/2013 08:20 AM

Work Order: 1305777
Lab ID: 1305777-03
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C			Method:SW8015M			Analyst: RPM	
DRO (>C10 - C28)	2,800		54	180	mg/Kg-dry	100	5/21/2013 17:47
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	100	5/21/2013 17:47
SEMIVOLATILES			Method:SW8270			Prep: SW3541 / 5/20/13	
						Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
2,4,6-Trichlorophenol	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
2,4-Dichlorophenol	U		0.27	1.8	mg/Kg-dry	10	5/22/2013 16:31
2,4-Dimethylphenol	U		0.37	1.8	mg/Kg-dry	10	5/22/2013 16:31
2,4-Dinitrophenol	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
2-Chlorophenol	U		0.66	1.8	mg/Kg-dry	10	5/22/2013 16:31
Acenaphthene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Anthracene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Benz(a)anthracene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Benzo(a)pyrene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Benzo(b)fluoranthene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Benzo(k)fluoranthene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Chrysene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Dibenz(a,h)anthracene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Fluoranthene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Fluorene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Naphthalene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Nitrobenzene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Pentachlorophenol	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Phenanthrene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Phenol	U		0.74	1.8	mg/Kg-dry	10	5/22/2013 16:31
Pyrene	U		0.21	1.8	mg/Kg-dry	10	5/22/2013 16:31
Surr: 2,4,6-Tribromophenol	208	S		36-126	%REC	10	5/22/2013 16:31
Surr: 2-Fluorobiphenyl	134	S		43-125	%REC	10	5/22/2013 16:31
Surr: 2-Fluorophenol	72.8			37-125	%REC	10	5/22/2013 16:31
Surr: 4-Terphenyl-d14	104			32-125	%REC	10	5/22/2013 16:31
Surr: Nitrobenzene-d5	101			37-125	%REC	10	5/22/2013 16:31
Surr: Phenol-d6	76.0			40-125	%REC	10	5/22/2013 16:31
VOLATILES - SW8260C			Method:SW8260			Analyst: WLR	
Benzene	U		0.00064	0.0054	mg/Kg-dry	1	5/20/2013 12:13
Ethylbenzene	U		0.00097	0.0054	mg/Kg-dry	1	5/20/2013 12:13
Isopropylbenzene	U		0.0011	0.0054	mg/Kg-dry	1	5/20/2013 12:13
m,p-Xylene	U		0.0018	0.011	mg/Kg-dry	1	5/20/2013 12:13
o-Xylene	U		0.0011	0.0054	mg/Kg-dry	1	5/20/2013 12:13

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#5 (2'-3')
Collection Date: 5/14/2013 08:20 AM

Work Order: 1305777
Lab ID: 1305777-03
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00064	0.0054	mg/Kg-dry	1	5/20/2013 12:13
Toluene	U		0.00075	0.0054	mg/Kg-dry	1	5/20/2013 12:13
Xylenes, Total	U		0.0018	0.011	mg/Kg-dry	1	5/20/2013 12:13
Surr: 1,2-Dichloroethane-d4	86.9			70-128	%REC	1	5/20/2013 12:13
Surr: 4-Bromofluorobenzene	92.8			73-126	%REC	1	5/20/2013 12:13
Surr: Dibromofluoromethane	94.3			71-128	%REC	1	5/20/2013 12:13
Surr: Toluene-d8	105			73-127	%REC	1	5/20/2013 12:13
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	6.90		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#8 (2'-3')
Collection Date: 5/14/2013 09:05 AM

Work Order: 1305777
Lab ID: 1305777-05
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C							
Method: SW8015M				Analyst: RPM			
DRO (>C10 - C28)	650		5.5	19	mg/Kg-dry	10	5/21/2013 18:11
Surr: 2-Fluorobiphenyl	218	S		60-135	%REC	10	5/21/2013 18:11
SEMIVOLATILES							
Method: SW8270				Prep: SW3541 / 5/20/13		Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
2,4,6-Trichlorophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
2,4-Dichlorophenol	U		0.028	0.18	mg/Kg-dry	1	5/21/2013 19:11
2,4-Dimethylphenol	U		0.039	0.18	mg/Kg-dry	1	5/21/2013 19:11
2,4-Dinitrophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
2-Chlorophenol	U		0.069	0.18	mg/Kg-dry	1	5/21/2013 19:11
Acenaphthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Anthracene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Benz(a)anthracene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Benzo(a)pyrene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Benzo(b)fluoranthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Benzo(k)fluoranthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Chrysene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Dibenz(a,h)anthracene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Fluoranthene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Fluorene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Naphthalene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Nitrobenzene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Pentachlorophenol	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Phenanthrene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Phenol	U		0.076	0.18	mg/Kg-dry	1	5/21/2013 19:11
Pyrene	U		0.022	0.18	mg/Kg-dry	1	5/21/2013 19:11
Surr: 2,4,6-Tribromophenol	95.5			36-126	%REC	1	5/21/2013 19:11
Surr: 2-Fluorobiphenyl	67.5			43-125	%REC	1	5/21/2013 19:11
Surr: 2-Fluorophenol	58.5			37-125	%REC	1	5/21/2013 19:11
Surr: 4-Terphenyl-d14	73.1			32-125	%REC	1	5/21/2013 19:11
Surr: Nitrobenzene-d5	70.4			37-125	%REC	1	5/21/2013 19:11
Surr: Phenol-d6	66.7			40-125	%REC	1	5/21/2013 19:11
VOLATILES - SW8260C							
Method: SW8260				Analyst: WLR			
Benzene	U		0.00066	0.0055	mg/Kg-dry	1	5/20/2013 12:37
Ethylbenzene	U		0.0010	0.0055	mg/Kg-dry	1	5/20/2013 12:37
Isopropylbenzene	U		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 12:37
m,p-Xylene	U		0.0019	0.011	mg/Kg-dry	1	5/20/2013 12:37
o-Xylene	U		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 12:37

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#8 (2'-3')
Collection Date: 5/14/2013 09:05 AM

Work Order: 1305777
Lab ID: 1305777-05
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00066	0.0055	mg/Kg-dry	1	5/20/2013 12:37
Toluene	U		0.00077	0.0055	mg/Kg-dry	1	5/20/2013 12:37
Xylenes, Total	U		0.0019	0.011	mg/Kg-dry	1	5/20/2013 12:37
Surr: 1,2-Dichloroethane-d4	95.2			70-128	%REC	1	5/20/2013 12:37
Surr: 4-Bromofluorobenzene	99.1			73-126	%REC	1	5/20/2013 12:37
Surr: Dibromofluoromethane	96.1			71-128	%REC	1	5/20/2013 12:37
Surr: Toluene-d8	101			73-127	%REC	1	5/20/2013 12:37
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	9.67		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#6 (2'-3')
Collection Date: 5/14/2013 09:25 AM

Work Order: 1305777
Lab ID: 1305777-07
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C			Method:SW8015M			Analyst: RPM	
DRO (>C10 - C28)	140		3.1	11	mg/Kg-dry	5	5/21/2013 18:34
Surr: 2-Fluorobiphenyl	122			60-135	%REC	5	5/21/2013 18:34
SEMIVOLATILES			Method:SW8270			Prep: SW3541 / 5/20/13 Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
2,4,6-Trichlorophenol	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
2,4-Dichlorophenol	U		0.31	2.1	mg/Kg-dry	10	5/22/2013 15:23
2,4-Dimethylphenol	U		0.43	2.1	mg/Kg-dry	10	5/22/2013 15:23
2,4-Dinitrophenol	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
2-Chlorophenol	U		0.77	2.1	mg/Kg-dry	10	5/22/2013 15:23
Acenaphthene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Anthracene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Benz(a)anthracene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Benzo(a)pyrene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Benzo(b)fluoranthene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Benzo(k)fluoranthene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Chrysene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Dibenz(a,h)anthracene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Fluoranthene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Fluorene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Naphthalene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Nitrobenzene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Pentachlorophenol	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Phenanthrene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Phenol	U		0.85	2.1	mg/Kg-dry	10	5/22/2013 15:23
Pyrene	U		0.25	2.1	mg/Kg-dry	10	5/22/2013 15:23
Surr: 2,4,6-Tribromophenol	188	S		36-126	%REC	10	5/22/2013 15:23
Surr: 2-Fluorobiphenyl	108			43-125	%REC	10	5/22/2013 15:23
Surr: 2-Fluorophenol	64.7			37-125	%REC	10	5/22/2013 15:23
Surr: 4-Terphenyl-d14	109			32-125	%REC	10	5/22/2013 15:23
Surr: Nitrobenzene-d5	94.9			37-125	%REC	10	5/22/2013 15:23
Surr: Phenol-d6	70.7			40-125	%REC	10	5/22/2013 15:23
VOLATILES - SW8260C			Method:SW8260			Analyst: WLR	
Benzene	U		0.00075	0.0062	mg/Kg-dry	1	5/20/2013 18:06
Ethylbenzene	U		0.0011	0.0062	mg/Kg-dry	1	5/20/2013 18:06
Isopropylbenzene	U		0.0012	0.0062	mg/Kg-dry	1	5/20/2013 18:06
m,p-Xylene	0.0060	J	0.0021	0.012	mg/Kg-dry	1	5/20/2013 18:06
o-Xylene	0.016		0.0012	0.0062	mg/Kg-dry	1	5/20/2013 18:06

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#6 (2'-3')
Collection Date: 5/14/2013 09:25 AM

Work Order: 1305777
Lab ID: 1305777-07
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00075	0.0062	mg/Kg-dry	1	5/20/2013 18:06
Toluene	U		0.00087	0.0062	mg/Kg-dry	1	5/20/2013 18:06
Xylenes, Total	0.022		0.0021	0.012	mg/Kg-dry	1	5/20/2013 18:06
Surr: 1,2-Dichloroethane-d4	98.7			70-128	%REC	1	5/20/2013 18:06
Surr: 4-Bromofluorobenzene	85.1			73-126	%REC	1	5/20/2013 18:06
Surr: Dibromofluoromethane	92.4			71-128	%REC	1	5/20/2013 18:06
Surr: Toluene-d8	105			73-127	%REC	1	5/20/2013 18:06
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	19.6		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#9 (2'-3')
Collection Date: 5/14/2013 09:55 AM

Work Order: 1305777
Lab ID: 1305777-08
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C			Method:SW8015M			Analyst: RPM	
DRO (>C10 - C28)	1,500		30	100	mg/Kg-dry	50	5/21/2013 18:58
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	50	5/21/2013 18:58
SEMIVOLATILES			Method:SW8270			Prep: SW3541 / 5/20/13 Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
2,4,6-Trichlorophenol	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
2,4-Dichlorophenol	U		0.030	0.20	mg/Kg-dry	1	5/21/2013 22:11
2,4-Dimethylphenol	U		0.042	0.20	mg/Kg-dry	1	5/21/2013 22:11
2,4-Dinitrophenol	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
2-Chlorophenol	U		0.074	0.20	mg/Kg-dry	1	5/21/2013 22:11
Acenaphthene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Anthracene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Benz(a)anthracene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Benzo(a)pyrene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Benzo(b)fluoranthene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Benzo(k)fluoranthene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Chrysene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Dibenz(a,h)anthracene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Fluoranthene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Fluorene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Naphthalene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Nitrobenzene	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Pentachlorophenol	U		0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Phenanthrene	0.066	J	0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Phenol	U		0.082	0.20	mg/Kg-dry	1	5/21/2013 22:11
Pyrene	0.068	J	0.024	0.20	mg/Kg-dry	1	5/21/2013 22:11
Surr: 2,4,6-Tribromophenol	70.1			36-126	%REC	1	5/21/2013 22:11
Surr: 2-Fluorobiphenyl	58.8			43-125	%REC	1	5/21/2013 22:11
Surr: 2-Fluorophenol	51.1			37-125	%REC	1	5/21/2013 22:11
Surr: 4-Terphenyl-d14	63.1			32-125	%REC	1	5/21/2013 22:11
Surr: Nitrobenzene-d5	54.7			37-125	%REC	1	5/21/2013 22:11
Surr: Phenol-d6	58.0			40-125	%REC	1	5/21/2013 22:11
VOLATILES - SW8260C			Method:SW8260			Analyst: WLR	
Benzene	U		0.00071	0.0059	mg/Kg-dry	1	5/20/2013 14:57
Ethylbenzene	U		0.0011	0.0059	mg/Kg-dry	1	5/20/2013 14:57
Isopropylbenzene	U		0.0012	0.0059	mg/Kg-dry	1	5/20/2013 14:57
m,p-Xylene	U		0.0020	0.012	mg/Kg-dry	1	5/20/2013 14:57
o-Xylene	U		0.0012	0.0059	mg/Kg-dry	1	5/20/2013 14:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#9 (2'-3')
Collection Date: 5/14/2013 09:55 AM

Work Order: 1305777
Lab ID: 1305777-08
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00071	0.0059	mg/Kg-dry	1	5/20/2013 14:57
Toluene	U		0.00083	0.0059	mg/Kg-dry	1	5/20/2013 14:57
Xylenes, Total	U		0.0020	0.012	mg/Kg-dry	1	5/20/2013 14:57
Surr: 1,2-Dichloroethane-d4	92.2			70-128	%REC	1	5/20/2013 14:57
Surr: 4-Bromofluorobenzene	95.2			73-126	%REC	1	5/20/2013 14:57
Surr: Dibromofluoromethane	94.8			71-128	%REC	1	5/20/2013 14:57
Surr: Toluene-d8	101			73-127	%REC	1	5/20/2013 14:57
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	15.9		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#3 (2'-3')
Collection Date: 5/14/2013 01:15 PM

Work Order: 1305777
Lab ID: 1305777-09
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C			Method:SW8015M			Analyst: RPM	
DRO (>C10 - C28)	3,300		57	190	mg/Kg-dry	100	5/21/2013 17:00
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	100	5/21/2013 17:00
SEMIVOLATILES			Method:SW8270			Prep: SW3541 / 5/20/13	
						Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
2,4,6-Trichlorophenol	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
2,4-Dichlorophenol	U		0.29	1.9	mg/Kg-dry	10	5/22/2013 16:53
2,4-Dimethylphenol	U		0.40	1.9	mg/Kg-dry	10	5/22/2013 16:53
2,4-Dinitrophenol	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
2-Chlorophenol	U		0.71	1.9	mg/Kg-dry	10	5/22/2013 16:53
Acenaphthene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Anthracene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Benz(a)anthracene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Benzo(a)pyrene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Benzo(b)fluoranthene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Benzo(k)fluoranthene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Chrysene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Dibenz(a,h)anthracene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Fluoranthene	1.6	J	0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Fluorene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Naphthalene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Nitrobenzene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Pentachlorophenol	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Phenanthrene	U		0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Phenol	U		0.79	1.9	mg/Kg-dry	10	5/22/2013 16:53
Pyrene	1.0	J	0.23	1.9	mg/Kg-dry	10	5/22/2013 16:53
Surr: 2,4,6-Tribromophenol	197	S		36-126	%REC	10	5/22/2013 16:53
Surr: 2-Fluorobiphenyl	118			43-125	%REC	10	5/22/2013 16:53
Surr: 2-Fluorophenol	74.6			37-125	%REC	10	5/22/2013 16:53
Surr: 4-Terphenyl-d14	109			32-125	%REC	10	5/22/2013 16:53
Surr: Nitrobenzene-d5	100			37-125	%REC	10	5/22/2013 16:53
Surr: Phenol-d6	79.1			40-125	%REC	10	5/22/2013 16:53
VOLATILES - SW8260C			Method:SW8260			Analyst: WLR	
Benzene	U		0.00069	0.0057	mg/Kg-dry	1	5/20/2013 15:21
Ethylbenzene	U		0.0010	0.0057	mg/Kg-dry	1	5/20/2013 15:21
Isopropylbenzene	U		0.0011	0.0057	mg/Kg-dry	1	5/20/2013 15:21
m,p-Xylene	U		0.0019	0.011	mg/Kg-dry	1	5/20/2013 15:21
o-Xylene	U		0.0011	0.0057	mg/Kg-dry	1	5/20/2013 15:21

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#3 (2'-3')
Collection Date: 5/14/2013 01:15 PM

Work Order: 1305777
Lab ID: 1305777-09
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00069	0.0057	mg/Kg-dry	1	5/20/2013 15:21
Toluene	U		0.00080	0.0057	mg/Kg-dry	1	5/20/2013 15:21
Xylenes, Total	U		0.0019	0.011	mg/Kg-dry	1	5/20/2013 15:21
Surr: 1,2-Dichloroethane-d4	94.5			70-128	%REC	1	5/20/2013 15:21
Surr: 4-Bromofluorobenzene	103			73-126	%REC	1	5/20/2013 15:21
Surr: Dibromofluoromethane	95.4			71-128	%REC	1	5/20/2013 15:21
Surr: Toluene-d8	101			73-127	%REC	1	5/20/2013 15:21
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	12.5		0.010	0.0100	wt%	1	5/21/2013 14:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#2 (2'-3')
Collection Date: 5/15/2013 07:50 AM

Work Order: 1305777
Lab ID: 1305777-10
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C							
Method: SW8015M				Prep: SW3541 / 5/20/13		Analyst: RPM	
DRO (>C10 - C28)	5,500		60	200	mg/Kg-dry	100	5/21/2013 17:24
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	100	5/21/2013 17:24
SEMIVOLATILES							
Method: SW8270				Prep: SW3541 / 5/20/13		Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
2,4,6-Trichlorophenol	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
2,4-Dichlorophenol	U		0.30	2.0	mg/Kg-dry	10	5/22/2013 15:46
2,4-Dimethylphenol	U		0.42	2.0	mg/Kg-dry	10	5/22/2013 15:46
2,4-Dinitrophenol	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
2-Chlorophenol	U		0.75	2.0	mg/Kg-dry	10	5/22/2013 15:46
Acenaphthene	3.8		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Anthracene	1.6	J	0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Benz(a)anthracene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Benzo(a)pyrene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Benzo(b)fluoranthene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Benzo(k)fluoranthene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Chrysene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Dibenz(a,h)anthracene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Fluoranthene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Fluorene	4.9		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Naphthalene	0.93	J	0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Nitrobenzene	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Pentachlorophenol	U		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Phenanthrene	6.9		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Phenol	U		0.83	2.0	mg/Kg-dry	10	5/22/2013 15:46
Pyrene	2.1		0.24	2.0	mg/Kg-dry	10	5/22/2013 15:46
Surr: 2,4,6-Tribromophenol	192	S		36-126	%REC	10	5/22/2013 15:46
Surr: 2-Fluorobiphenyl	153	S		43-125	%REC	10	5/22/2013 15:46
Surr: 2-Fluorophenol	62.6			37-125	%REC	10	5/22/2013 15:46
Surr: 4-Terphenyl-d14	90.0			32-125	%REC	10	5/22/2013 15:46
Surr: Nitrobenzene-d5	78.6			37-125	%REC	10	5/22/2013 15:46
Surr: Phenol-d6	63.5			40-125	%REC	10	5/22/2013 15:46
VOLATILES - SW8260C							
Method: SW8260				Analyst: WLR			
Benzene	U		0.00073	0.0060	mg/Kg-dry	1	5/20/2013 15:44
Ethylbenzene	U		0.0011	0.0060	mg/Kg-dry	1	5/20/2013 15:44
Isopropylbenzene	U		0.0012	0.0060	mg/Kg-dry	1	5/20/2013 15:44
m,p-Xylene	U		0.0021	0.012	mg/Kg-dry	1	5/20/2013 15:44
o-Xylene	0.054		0.0012	0.0060	mg/Kg-dry	1	5/20/2013 15:44

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#2 (2'-3')
Collection Date: 5/15/2013 07:50 AM

Work Order: 1305777
Lab ID: 1305777-10
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00073	0.0060	mg/Kg-dry	1	5/20/2013 15:44
Toluene	U		0.00085	0.0060	mg/Kg-dry	1	5/20/2013 15:44
Xylenes, Total	0.054		0.0021	0.012	mg/Kg-dry	1	5/20/2013 15:44
Surr: 1,2-Dichloroethane-d4	93.1			70-128	%REC	1	5/20/2013 15:44
Surr: 4-Bromofluorobenzene	75.1			73-126	%REC	1	5/20/2013 15:44
Surr: Dibromofluoromethane	92.7			71-128	%REC	1	5/20/2013 15:44
Surr: Toluene-d8	112			73-127	%REC	1	5/20/2013 15:44
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	17.3		0.010	0.0100	wt%	1	5/21/2013 15:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: Equipment Blank
Collection Date: 5/15/2013 08:40 AM

Work Order: 1305777
Lab ID: 1305777-12
Matrix: SOIL

Analyses	Result	Qual	SDL	MLQ	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C							
			Method: SW8015M		Prep: SW3541 / 5/20/13		Analyst: RPM
DRO (>C10 - C28)	U		0.51	1.7	mg/Kg-dry	1	5/21/2013 03:15
Surr: 2-Fluorobiphenyl	90.6			60-135	%REC	1	5/21/2013 03:15
SEMIVOLATILES							
			Method: SW8270		Prep: SW3541 / 5/20/13		Analyst: JLJ
2,4,5-Trichlorophenol	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
2,4,6-Trichlorophenol	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
2,4-Dichlorophenol	U		0.025	0.17	mg/Kg-dry	1	5/22/2013 12:39
2,4-Dimethylphenol	U		0.035	0.17	mg/Kg-dry	1	5/22/2013 12:39
2,4-Dinitrophenol	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
2-Chlorophenol	U		0.063	0.17	mg/Kg-dry	1	5/22/2013 12:39
Acenaphthene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Anthracene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Benz(a)anthracene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Benzo(a)pyrene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Benzo(b)fluoranthene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Benzo(k)fluoranthene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Chrysene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Dibenz(a,h)anthracene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Fluoranthene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Fluorene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Naphthalene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Nitrobenzene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Pentachlorophenol	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Phenanthrene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Phenol	U		0.070	0.17	mg/Kg-dry	1	5/22/2013 12:39
Pyrene	U		0.020	0.17	mg/Kg-dry	1	5/22/2013 12:39
Surr: 2,4,6-Tribromophenol	75.7			36-126	%REC	1	5/22/2013 12:39
Surr: 2-Fluorobiphenyl	76.0			43-125	%REC	1	5/22/2013 12:39
Surr: 2-Fluorophenol	71.8			37-125	%REC	1	5/22/2013 12:39
Surr: 4-Terphenyl-d14	121			32-125	%REC	1	5/22/2013 12:39
Surr: Nitrobenzene-d5	83.9			37-125	%REC	1	5/22/2013 12:39
Surr: Phenol-d6	73.1			40-125	%REC	1	5/22/2013 12:39
VOLATILES - SW8260C							
			Method: SW8260		Analyst: WLR		
Benzene	U		0.00061	0.0051	mg/Kg-dry	1	5/20/2013 10:40
Ethylbenzene	U		0.00091	0.0051	mg/Kg-dry	1	5/20/2013 10:40
Isopropylbenzene	U		0.0010	0.0051	mg/Kg-dry	1	5/20/2013 10:40
m,p-Xylene	U		0.0017	0.010	mg/Kg-dry	1	5/20/2013 10:40
o-Xylene	U		0.0010	0.0051	mg/Kg-dry	1	5/20/2013 10:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: Equipment Blank
Collection Date: 5/15/2013 08:40 AM

Work Order: 1305777
Lab ID: 1305777-12
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00061	0.0051	mg/Kg-dry	1	5/20/2013 10:40
Toluene	U		0.00071	0.0051	mg/Kg-dry	1	5/20/2013 10:40
Xylenes, Total	U		0.0017	0.010	mg/Kg-dry	1	5/20/2013 10:40
Surr: 1,2-Dichloroethane-d4	97.6			70-128	%REC	1	5/20/2013 10:40
Surr: 4-Bromofluorobenzene	97.4			73-126	%REC	1	5/20/2013 10:40
Surr: Dibromofluoromethane	96.4			71-128	%REC	1	5/20/2013 10:40
Surr: Toluene-d8	98.3			73-127	%REC	1	5/20/2013 10:40
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	1.43		0.010	0.0100	wt%	1	5/21/2013 15:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#7 (2'-3')
Collection Date: 5/15/2013 09:35 AM

Work Order: 1305777
Lab ID: 1305777-13
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C							
Method: SW8015M				Prep: SW3541 / 5/20/13		Analyst: RPM	
DRO (>C10 - C28)	3,600		54	180	mg/Kg-dry	100	5/21/2013 17:47
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	100	5/21/2013 17:47
SEMIVOLATILES							
Method: SW8270				Prep: SW3541 / 5/20/13		Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
2,4,6-Trichlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
2,4-Dichlorophenol	U		0.27	1.8	mg/Kg-dry	10	5/22/2013 17:16
2,4-Dimethylphenol	U		0.38	1.8	mg/Kg-dry	10	5/22/2013 17:16
2,4-Dinitrophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
2-Chlorophenol	U		0.67	1.8	mg/Kg-dry	10	5/22/2013 17:16
Acenaphthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Benz(a)anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Benzo(a)pyrene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Benzo(b)fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Benzo(k)fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Chrysene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Dibenz(a,h)anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Fluorene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Naphthalene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Nitrobenzene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Pentachlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Phenanthrene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Phenol	U		0.75	1.8	mg/Kg-dry	10	5/22/2013 17:16
Pyrene	0.94	J	0.22	1.8	mg/Kg-dry	10	5/22/2013 17:16
Surr: 2,4,6-Tribromophenol	185	S		36-126	%REC	10	5/22/2013 17:16
Surr: 2-Fluorobiphenyl	116			43-125	%REC	10	5/22/2013 17:16
Surr: 2-Fluorophenol	73.4			37-125	%REC	10	5/22/2013 17:16
Surr: 4-Terphenyl-d14	102			32-125	%REC	10	5/22/2013 17:16
Surr: Nitrobenzene-d5	96.5			37-125	%REC	10	5/22/2013 17:16
Surr: Phenol-d6	79.2			40-125	%REC	10	5/22/2013 17:16
VOLATILES - SW8260C							
Method: SW8260				Analyst: WLR			
Benzene	U		0.00065	0.0054	mg/Kg-dry	1	5/20/2013 16:08
Ethylbenzene	U		0.00098	0.0054	mg/Kg-dry	1	5/20/2013 16:08
Isopropylbenzene	U		0.0011	0.0054	mg/Kg-dry	1	5/20/2013 16:08
m,p-Xylene	U		0.0018	0.011	mg/Kg-dry	1	5/20/2013 16:08
o-Xylene	U		0.0011	0.0054	mg/Kg-dry	1	5/20/2013 16:08

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#7 (2'-3')
Collection Date: 5/15/2013 09:35 AM

Work Order: 1305777
Lab ID: 1305777-13
Matrix: SOIL

Analyses	Result	Qual	SDL	MQL	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00065	0.0054	mg/Kg-dry	1	5/20/2013 16:08
Toluene	U		0.00076	0.0054	mg/Kg-dry	1	5/20/2013 16:08
Xylenes, Total	U		0.0018	0.011	mg/Kg-dry	1	5/20/2013 16:08
Surr: 1,2-Dichloroethane-d4	98.3			70-128	%REC	1	5/20/2013 16:08
Surr: 4-Bromofluorobenzene	88.7			73-126	%REC	1	5/20/2013 16:08
Surr: Dibromofluoromethane	96.4			71-128	%REC	1	5/20/2013 16:08
Surr: Toluene-d8	103			73-127	%REC	1	5/20/2013 16:08
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	8.09		0.010	0.0100	wt%	1	5/21/2013 15:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#10 (2'-3')
Collection Date: 5/15/2013 10:25 AM

Work Order: 1305777
Lab ID: 1305777-14
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C							
Method: SW8015M				Prep: SW3541 / 5/20/13		Analyst: RPM	
DRO (>C10 - C28)	730		11	38	mg/Kg-dry	20	5/21/2013 18:11
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	20	5/21/2013 18:11
SEMIVOLATILES							
Method: SW8270				Prep: SW3541 / 5/20/13		Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
2,4,6-Trichlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
2,4-Dichlorophenol	U		0.28	1.8	mg/Kg-dry	10	5/22/2013 17:38
2,4-Dimethylphenol	U		0.39	1.8	mg/Kg-dry	10	5/22/2013 17:38
2,4-Dinitrophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
2-Chlorophenol	U		0.68	1.8	mg/Kg-dry	10	5/22/2013 17:38
Acenaphthene	2.0		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Anthracene	0.87	J	0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Benz(a)anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Benzo(a)pyrene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Benzo(b)fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Benzo(k)fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Chrysene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Dibenz(a,h)anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Fluoranthene	0.41	J	0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Fluorene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Naphthalene	1.5	J	0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Nitrobenzene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Pentachlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Phenanthrene	8.0		0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Phenol	U		0.76	1.8	mg/Kg-dry	10	5/22/2013 17:38
Pyrene	1.3	J	0.22	1.8	mg/Kg-dry	10	5/22/2013 17:38
Surr: 2,4,6-Tribromophenol	157	S		36-126	%REC	10	5/22/2013 17:38
Surr: 2-Fluorobiphenyl	87.8			43-125	%REC	10	5/22/2013 17:38
Surr: 2-Fluorophenol	65.4			37-125	%REC	10	5/22/2013 17:38
Surr: 4-Terphenyl-d14	94.5			32-125	%REC	10	5/22/2013 17:38
Surr: Nitrobenzene-d5	66.4			37-125	%REC	10	5/22/2013 17:38
Surr: Phenol-d6	62.8			40-125	%REC	10	5/22/2013 17:38
VOLATILES - SW8260C							
Method: SW8260				Analyst: WLR			
Benzene	0.0033	J	0.00066	0.0055	mg/Kg-dry	1	5/20/2013 16:31
Ethylbenzene	U		0.0010	0.0055	mg/Kg-dry	1	5/20/2013 16:31
Isopropylbenzene	U		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 16:31
m,p-Xylene	0.047		0.0019	0.011	mg/Kg-dry	1	5/20/2013 16:31
o-Xylene	0.11		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 16:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#10 (2'-3')
Collection Date: 5/15/2013 10:25 AM

Work Order: 1305777
Lab ID: 1305777-14
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00066	0.0055	mg/Kg-dry	1	5/20/2013 16:31
Toluene	U		0.00077	0.0055	mg/Kg-dry	1	5/20/2013 16:31
Xylenes, Total	0.16		0.0019	0.011	mg/Kg-dry	1	5/20/2013 16:31
Surr: 1,2-Dichloroethane-d4	95.4			70-128	%REC	1	5/20/2013 16:31
Surr: 4-Bromofluorobenzene	81.6			73-126	%REC	1	5/20/2013 16:31
Surr: Dibromofluoromethane	91.4			71-128	%REC	1	5/20/2013 16:31
Surr: Toluene-d8	110			73-127	%REC	1	5/20/2013 16:31
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	9.67		0.010	0.0100	wt%	1	5/21/2013 15:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#4 (2'-3')
Collection Date: 5/15/2013 11:19 AM

Work Order: 1305777
Lab ID: 1305777-15
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
TPH (DRO) - 8015C							
Method: SW8015M				Prep: SW3541 / 5/20/13		Analyst: RPM	
DRO (>C10 - C28)	6,300		110	380	mg/Kg-dry	200	5/21/2013 18:34
Surr: 2-Fluorobiphenyl	0	S		60-135	%REC	200	5/21/2013 18:34
SEMIVOLATILES							
Method: SW8270				Prep: SW3541 / 5/20/13		Analyst: JLJ	
2,4,5-Trichlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
2,4,6-Trichlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
2,4-Dichlorophenol	U		0.28	1.8	mg/Kg-dry	10	5/22/2013 16:08
2,4-Dimethylphenol	U		0.39	1.8	mg/Kg-dry	10	5/22/2013 16:08
2,4-Dinitrophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
2-Chlorophenol	U		0.69	1.8	mg/Kg-dry	10	5/22/2013 16:08
Acenaphthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Benz(a)anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Benzo(a)pyrene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Benzo(b)fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Benzo(k)fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Chrysene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Dibenz(a,h)anthracene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Fluoranthene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Fluorene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Naphthalene	2.7		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Nitrobenzene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Pentachlorophenol	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Phenanthrene	0.89	J	0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Phenol	U		0.76	1.8	mg/Kg-dry	10	5/22/2013 16:08
Pyrene	U		0.22	1.8	mg/Kg-dry	10	5/22/2013 16:08
Surr: 2,4,6-Tribromophenol	231	S		36-126	%REC	10	5/22/2013 16:08
Surr: 2-Fluorobiphenyl	136	S		43-125	%REC	10	5/22/2013 16:08
Surr: 2-Fluorophenol	88.4			37-125	%REC	10	5/22/2013 16:08
Surr: 4-Terphenyl-d14	104			32-125	%REC	10	5/22/2013 16:08
Surr: Nitrobenzene-d5	104			37-125	%REC	10	5/22/2013 16:08
Surr: Phenol-d6	95.1			40-125	%REC	10	5/22/2013 16:08
VOLATILES - SW8260C							
Method: SW8260				Analyst: WLR			
Benzene	0.0043	J	0.00066	0.0055	mg/Kg-dry	1	5/20/2013 16:55
Ethylbenzene	0.13		0.0010	0.0055	mg/Kg-dry	1	5/20/2013 16:55
Isopropylbenzene	0.14		0.0011	0.0055	mg/Kg-dry	1	5/20/2013 16:55
m,p-Xylene	1.7		0.019	0.11	mg/Kg-dry	10	5/21/2013 11:09
o-Xylene	0.93		0.011	0.055	mg/Kg-dry	10	5/21/2013 11:09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: SB#4 (2'-3')
Collection Date: 5/15/2013 11:19 AM

Work Order: 1305777
Lab ID: 1305777-15
Matrix: SOIL

Analyses	Result	Qual	SDL	ML	Units	Dilution Factor	Date Analyzed
Styrene	U		0.00066	0.0055	mg/Kg-dry	1	5/20/2013 16:55
Toluene	0.0069		0.00078	0.0055	mg/Kg-dry	1	5/20/2013 16:55
Xylenes, Total	2.6		0.019	0.11	mg/Kg-dry	10	5/21/2013 11:09
Surr: 1,2-Dichloroethane-d4	90.6			70-128	%REC	1	5/20/2013 16:55
Surr: 1,2-Dichloroethane-d4	88.2			70-128	%REC	10	5/21/2013 11:09
Surr: 4-Bromofluorobenzene	91.4			73-126	%REC	1	5/20/2013 16:55
Surr: 4-Bromofluorobenzene	83.1			73-126	%REC	10	5/21/2013 11:09
Surr: Dibromofluoromethane	93.7			71-128	%REC	1	5/20/2013 16:55
Surr: Dibromofluoromethane	93.7			71-128	%REC	10	5/21/2013 11:09
Surr: Toluene-d8	122			73-127	%REC	1	5/20/2013 16:55
Surr: Toluene-d8	102			73-127	%REC	10	5/21/2013 11:09
MOISTURE			Method: SW3550				Analyst: KAH
Percent Moisture	9.72		0.010	0.0100	wt%	1	5/21/2013 15:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
Sample ID: Trip Blank - Soil
Collection Date: 5/14/2013

Work Order: 1305777
Lab ID: 1305777-16
Matrix: SOIL

Analyses	Result	Qual	SDL	SQL	Units	Dilution Factor	Date Analyzed
VOLATILES - SW8260C			Method: SW8260			Analyst: WLR	
Benzene	U		0.00060	0.0050	mg/Kg	1	5/20/2013 11:03
Ethylbenzene	U		0.00090	0.0050	mg/Kg	1	5/20/2013 11:03
Isopropylbenzene	U		0.0010	0.0050	mg/Kg	1	5/20/2013 11:03
m,p-Xylene	U		0.0017	0.010	mg/Kg	1	5/20/2013 11:03
o-Xylene	U		0.0010	0.0050	mg/Kg	1	5/20/2013 11:03
Styrene	U		0.00060	0.0050	mg/Kg	1	5/20/2013 11:03
Toluene	0.00074	J	0.00070	0.0050	mg/Kg	1	5/20/2013 11:03
Xylenes, Total	U		0.0017	0.010	mg/Kg	1	5/20/2013 11:03
Surr: 1,2-Dichloroethane-d4	94.7			70-128	%REC	1	5/20/2013 11:03
Surr: 4-Bromofluorobenzene	98.1			73-126	%REC	1	5/20/2013 11:03
Surr: Dibromofluoromethane	95.5			71-128	%REC	1	5/20/2013 11:03
Surr: Toluene-d8	98.4			73-127	%REC	1	5/20/2013 11:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Work Order: 1305777
Client: Environmental Resources Management
Project: Gallup NM # PN 0097134

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
<u>Batch ID 70112A</u> <u>Test Name: TPH (DRO) - 8015C</u>						
1305777-01B	SB#1 (2'-3')	Soil	5/14/2013 7:50:00 AM		5/19/2013 11:30 AM	5/21/2013 05:00 PM
1305777-02B	SB#11 (2'-3')		5/14/2013 3:00:00 PM		5/19/2013 11:30 AM	5/21/2013 05:24 PM
1305777-03B	SB#5 (2'-3')		5/14/2013 8:20:00 AM		5/19/2013 11:30 AM	5/21/2013 05:47 PM
1305777-05B	SB#8 (2'-3')		5/14/2013 9:05:00 AM		5/19/2013 11:30 AM	5/21/2013 06:11 PM
1305777-07B	SB#6 (2'-3')		5/14/2013 9:25:00 AM		5/19/2013 11:30 AM	5/21/2013 06:34 PM
1305777-08B	SB#9 (2'-3')		5/14/2013 9:55:00 AM		5/19/2013 11:30 AM	5/21/2013 06:58 PM
1305777-09B	SB#3 (2'-3')		5/14/2013 1:15:00 PM		5/19/2013 11:30 AM	5/21/2013 05:00 PM
<u>Batch ID 70114</u> <u>Test Name: Semivolatiles</u>						
1305777-01B	SB#1 (2'-3')	Soil	5/14/2013 7:50:00 AM		5/20/2013 09:00 AM	5/22/2013 02:39 PM
1305777-02B	SB#11 (2'-3')		5/14/2013 3:00:00 PM		5/20/2013 09:00 AM	5/21/2013 06:49 PM
1305777-03B	SB#5 (2'-3')		5/14/2013 8:20:00 AM		5/20/2013 09:00 AM	5/22/2013 04:31 PM
1305777-05B	SB#8 (2'-3')		5/14/2013 9:05:00 AM		5/20/2013 09:00 AM	5/21/2013 07:11 PM
1305777-07B	SB#6 (2'-3')		5/14/2013 9:25:00 AM		5/20/2013 09:00 AM	5/22/2013 03:23 PM
1305777-08B	SB#9 (2'-3')		5/14/2013 9:55:00 AM		5/20/2013 09:00 AM	5/21/2013 10:11 PM
1305777-09B	SB#3 (2'-3')		5/14/2013 1:15:00 PM		5/20/2013 09:00 AM	5/22/2013 04:53 PM
1305777-10B	SB#2 (2'-3')		5/15/2013 7:50:00 AM		5/20/2013 09:00 AM	5/22/2013 03:46 PM
1305777-12B	Equipment Blank		5/15/2013 8:40:00 AM		5/20/2013 09:00 AM	5/22/2013 12:39 PM
1305777-13B	SB#7 (2'-3')		5/15/2013 9:35:00 AM		5/20/2013 09:00 AM	5/22/2013 05:16 PM
1305777-14B	SB#10 (2'-3')		5/15/2013 10:25:00 AM		5/20/2013 09:00 AM	5/22/2013 05:38 PM
1305777-15B	SB#4 (2'-3')		5/15/2013 11:19:00 AM		5/20/2013 09:00 AM	5/22/2013 04:08 PM

Work Order: 1305777
Client: Environmental Resources Management
Project: Gallup NM # PN 0097134

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
<u>Batch ID</u> 70124		<u>Test Name:</u> TPH (DRO) - 8015C				
1305777-10B	SB#2 (2'-3')	Soil	5/15/2013 7:50:00 AM		5/20/2013 10:00 AM	5/21/2013 05:24 PM
1305777-12B	Equipment Blank		5/15/2013 8:40:00 AM		5/20/2013 10:00 AM	5/21/2013 03:15 AM
1305777-13B	SB#7 (2'-3')		5/15/2013 9:35:00 AM		5/20/2013 10:00 AM	5/21/2013 05:47 PM
1305777-14B	SB#10 (2'-3')		5/15/2013 10:25:00 AM		5/20/2013 10:00 AM	5/21/2013 06:11 PM
1305777-15B	SB#4 (2'-3')		5/15/2013 11:19:00 AM		5/20/2013 10:00 AM	5/21/2013 06:34 PM
<u>Batch ID</u> R147609		<u>Test Name:</u> Volatiles - SW8260C				
1305777-01A	SB#1 (2'-3')	Soil	5/14/2013 7:50:00 AM			5/20/2013 11:26 AM
1305777-02A	SB#11 (2'-3')		5/14/2013 3:00:00 PM			5/20/2013 11:50 AM
1305777-03A	SB#5 (2'-3')		5/14/2013 8:20:00 AM			5/20/2013 12:13 PM
1305777-05A	SB#8 (2'-3')		5/14/2013 9:05:00 AM			5/20/2013 12:37 PM
1305777-07A	SB#6 (2'-3')		5/14/2013 9:25:00 AM			5/20/2013 06:06 PM
1305777-08A	SB#9 (2'-3')		5/14/2013 9:55:00 AM			5/20/2013 02:57 PM
1305777-09A	SB#3 (2'-3')		5/14/2013 1:15:00 PM			5/20/2013 03:21 PM
1305777-10A	SB#2 (2'-3')		5/15/2013 7:50:00 AM			5/20/2013 03:44 PM
1305777-12A	Equipment Blank		5/15/2013 8:40:00 AM			5/20/2013 10:40 AM
1305777-13A	SB#7 (2'-3')		5/15/2013 9:35:00 AM			5/20/2013 04:08 PM
1305777-14A	SB#10 (2'-3')		5/15/2013 10:25:00 AM			5/20/2013 04:31 PM
1305777-15A	SB#4 (2'-3')		5/15/2013 11:19:00 AM			5/20/2013 04:55 PM
1305777-16A	Trip Blank - Soil		5/14/2013			5/20/2013 11:03 AM
<u>Batch ID</u> R147658		<u>Test Name:</u> Volatiles - SW8260C				
1305777-15A	SB#4 (2'-3')	Soil	5/15/2013 11:19:00 AM			5/21/2013 11:09 AM

Work Order: 1305777
Client: Environmental Resources Management
Project: Gallup NM # PN 0097134

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
<u>Batch ID R147725</u> <u>Test Name: Moisture</u>						
1305777-01B	SB#1 (2'-3')	Soil	5/14/2013 7:50:00 AM			5/21/2013 02:00 PM
1305777-02B	SB#11 (2'-3')		5/14/2013 3:00:00 PM			5/21/2013 02:00 PM
1305777-03B	SB#5 (2'-3')		5/14/2013 8:20:00 AM			5/21/2013 02:00 PM
1305777-05B	SB#8 (2'-3')		5/14/2013 9:05:00 AM			5/21/2013 02:00 PM
1305777-07B	SB#6 (2'-3')		5/14/2013 9:25:00 AM			5/21/2013 02:00 PM
1305777-08B	SB#9 (2'-3')		5/14/2013 9:55:00 AM			5/21/2013 02:00 PM
1305777-09B	SB#3 (2'-3')		5/14/2013 1:15:00 PM			5/21/2013 02:00 PM
<u>Batch ID R147733</u> <u>Test Name: Moisture</u>						
1305777-10B	SB#2 (2'-3')	Soil	5/15/2013 7:50:00 AM			5/21/2013 03:00 PM
1305777-12B	Equipment Blank		5/15/2013 8:40:00 AM			5/21/2013 03:00 PM
1305777-13B	SB#7 (2'-3')		5/15/2013 9:35:00 AM			5/21/2013 03:00 PM
1305777-14B	SB#10 (2'-3')		5/15/2013 10:25:00 AM			5/21/2013 03:00 PM
1305777-15B	SB#4 (2'-3')		5/15/2013 11:19:00 AM			5/21/2013 03:00 PM

WorkOrder: 1305777
InstrumentID: Balance1
Test Code: MOIST_SW3550
Test Number: SW3550
Test Name: Moisture

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: wt%

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	Percent Moisture	MOIST	0	0.010	0.010

WorkOrder: 1305777
InstrumentID: FID-7
Test Code: 8015M_DRO_S
Test Number: SW8015M
Test Name: TPH (DRO) - 8015C

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	DRO (>C10 - C28)	TPHDIESEL	0.47	0.50	1.7
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0

WorkOrder: 1305777
InstrumentID: FID-8
Test Code: 8015M_DRO_S
Test Number: SW8015M
Test Name: TPH (DRO) - 8015C

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	DRO (>C10 - C28)	TPHDIESEL	0.56	0.50	1.7
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0

WorkOrder: 1305777

InstrumentID: SV-3

Test Code: 8270_S

Test Number: SW8270

Test Name: Semivolatiles

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	2,4,5-Trichlorophenol	95-95-4	0.075	0.020	0.17
A	2,4,6-Trichlorophenol	88-06-2	0.071	0.020	0.17
A	2,4-Dichlorophenol	120-83-2	0.071	0.025	0.17
A	2,4-Dimethylphenol	105-67-9	0.074	0.035	0.17
A	2,4-Dinitrophenol	51-28-5	0.069	0.020	0.17
A	2-Chlorophenol	95-57-8	0.070	0.062	0.17
A	Acenaphthene	83-32-9	0.077	0.020	0.17
A	Anthracene	120-12-7	0.083	0.020	0.17
A	Benz(a)anthracene	56-55-3	0.082	0.020	0.17
A	Benzo(a)pyrene	50-32-8	0.075	0.020	0.17
A	Benzo(b)fluoranthene	205-99-2	0.060	0.020	0.17
A	Benzo(k)fluoranthene	207-08-9	0.10	0.020	0.17
A	Chrysene	218-01-9	0.084	0.020	0.17
A	Dibenz(a,h)anthracene	53-70-3	0.074	0.020	0.17
A	Fluoranthene	206-44-0	0.085	0.020	0.17
A	Fluorene	86-73-7	0.079	0.020	0.17
A	Naphthalene	91-20-3	0.077	0.020	0.17
A	Nitrobenzene	98-95-3	0.081	0.020	0.17
A	Pentachlorophenol	87-86-5	0.064	0.020	0.17
A	Phenanthrene	85-01-8	0.081	0.020	0.17
A	Phenol	108-95-2	0.063	0.069	0.17
A	Pyrene	129-00-0	0.076	0.020	0.17
S	Surr: 2,4,6-Tribromophenol	118-79-6	0	0	0.17
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0.17
S	Surr: 2-Fluorophenol	367-12-4	0	0	0.17
S	Surr: 4-Terphenyl-d14	1718-51-0	0	0	0.17
S	Surr: Nitrobenzene-d5	4165-60-0	0	0	0.17
s	Surr: Phenol-d6	13127-88-3	0	0	0.17

WorkOrder: 1305777

InstrumentID: SV-5

Test Code: 8270_S

Test Number: SW8270

Test Name: Semivolatiles

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	2,4,5-Trichlorophenol	95-95-4	0.069	0.020	0.17
A	2,4,6-Trichlorophenol	88-06-2	0.066	0.020	0.17
A	2,4-Dichlorophenol	120-83-2	0.071	0.025	0.17
A	2,4-Dimethylphenol	105-67-9	0.071	0.035	0.17
A	2,4-Dinitrophenol	51-28-5	0.041	0.020	0.17
A	2-Chlorophenol	95-57-8	0.071	0.062	0.17
A	Acenaphthene	83-32-9	0.073	0.020	0.17
A	Anthracene	120-12-7	0.076	0.020	0.17
A	Benz(a)anthracene	56-55-3	0.077	0.020	0.17
A	Benzo(a)pyrene	50-32-8	0.066	0.020	0.17
A	Benzo(b)fluoranthene	205-99-2	0.062	0.020	0.17
A	Benzo(k)fluoranthene	207-08-9	0.087	0.020	0.17
A	Chrysene	218-01-9	0.079	0.020	0.17
A	Dibenz(a,h)anthracene	53-70-3	0.066	0.020	0.17
A	Fluoranthene	206-44-0	0.071	0.020	0.17
A	Fluorene	86-73-7	0.074	0.020	0.17
A	Naphthalene	91-20-3	0.075	0.020	0.17
A	Nitrobenzene	98-95-3	0.079	0.020	0.17
A	Pentachlorophenol	87-86-5	0.056	0.020	0.17
A	Phenanthrene	85-01-8	0.076	0.020	0.17
A	Phenol	108-95-2	0.069	0.069	0.17
A	Pyrene	129-00-0	0.077	0.020	0.17
S	Surr: 2,4,6-Tribromophenol	118-79-6	0	0	0.17
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0.17
S	Surr: 2-Fluorophenol	367-12-4	0	0	0.17
S	Surr: 4-Terphenyl-d14	1718-51-0	0	0	0.17
S	Surr: Nitrobenzene-d5	4165-60-0	0	0	0.17
s	Surr: Phenol-d6	13127-88-3	0	0	0.17

WorkOrder: 1305777

InstrumentID: VOA5

Test Code: 8260_S

Test Number: SW8260

Test Name: Volatiles - SW8260C

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	Benzene	71-43-2	0.0010	0.00060	0.0050
A	Ethylbenzene	100-41-4	0.0010	0.00090	0.0050
A	Isopropylbenzene	98-82-8	0.0010	0.0010	0.0050
A	m,p-Xylene	179601-23-1	0.0021	0.0017	0.010
A	o-Xylene	95-47-6	0.0010	0.0010	0.0050
A	Styrene	100-42-5	0.0010	0.00060	0.0050
A	Toluene	108-88-3	0.0011	0.00070	0.0050
M	Xylenes, Total	1330-20-7	0.0031	0.0017	0.010
S	Surr: 1,2-Dichloroethane-d4	17060-07-0	0	0	0
S	Surr: 4-Bromofluorobenzene	460-00-4	0	0	0
S	Surr: Dibromofluoromethane	1868-53-7	0	0	0
S	Surr: Toluene-d8	2037-26-5	0	0	0

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70112A** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS3-130519-70112A				Units: mg/Kg		Analysis Date: 5/20/2013 08:58 PM			
Client ID:	Run ID: FID-7_130519B				SeqNo: 3225712		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	3.449	0	3.3	0	105	60-135	0			

LCS	Sample ID: FLCSS3-130519-70112A				Units: mg/Kg		Analysis Date: 5/20/2013 09:22 PM			
Client ID:	Run ID: FID-7_130519B				SeqNo: 3225713		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	33.96	1.7	33.3	0	102	70-130				
<i>Surr: 2-Fluorobiphenyl</i>	3.583	0	3.3	0	109	60-135	0			

MS	Sample ID: 1305777-02BMS				Units: mg/Kg		Analysis Date: 5/20/2013 10:09 PM			
Client ID: SB#11 (2'-3')	Run ID: FID-7_130519B				SeqNo: 3225716		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	2594	1.7	33.22	2266	987	70-130				SEO
<i>Surr: 2-Fluorobiphenyl</i>	25.05	0	3.292	0	761	60-135	0			S

MSD	Sample ID: 1305777-02BMSD				Units: mg/Kg		Analysis Date: 5/20/2013 10:33 PM			
Client ID: SB#11 (2'-3')	Run ID: FID-7_130519B				SeqNo: 3225717		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	2498	1.7	33.21	2266	699	70-130	2594	3.76	30	SEO
<i>Surr: 2-Fluorobiphenyl</i>	38.19	0	3.291	0	1160	60-135	25.05	41.5	30	SR

The following samples were analyzed in this batch:

1305777-01B	1305777-02B	1305777-03B
1305777-05B	1305777-07B	1305777-08B
1305777-09B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 1 of 13

Client: Environmental Resources Management
 Work Order: 1305777
 Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70124** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS1-130520-70124				Units: mg/Kg		Analysis Date: 5/21/2013 02:04 AM			
Client ID:	Run ID: FID-7_130520A				SeqNo: 3225646		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	3.216	0	3.3	0	97.5	60-135	0			

LCS	Sample ID: FLCSS1-130520-70124				Units: mg/Kg		Analysis Date: 5/21/2013 02:28 AM			
Client ID:	Run ID: FID-7_130520A				SeqNo: 3225647		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	36.8	1.7	33.3	0	111	70-130				
<i>Surr: 2-Fluorobiphenyl</i>	3.46	0	3.3	0	105	60-135	0			

MS	Sample ID: 1305777-15BMS				Units: mg/Kg		Analysis Date: 5/21/2013 02:28 AM			
Client ID: SB#4 (2'-3')	Run ID: FID-7_130520A				SeqNo: 3225650		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	4596	1.7	33.24	5104	-1530	70-130				SEO
<i>Surr: 2-Fluorobiphenyl</i>	118.9	0	3.295	0	3610	60-135	0			S

MSD	Sample ID: 1305777-15BMSD				Units: mg/Kg		Analysis Date: 5/21/2013 02:51 AM			
Client ID: SB#4 (2'-3')	Run ID: FID-7_130520A				SeqNo: 3225651		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	6344	1.7	33.23	5104	3730	70-130	4596	32	30	SREO
<i>Surr: 2-Fluorobiphenyl</i>	131.7	0	3.293	0	4000	60-135	118.9	10.2	30	S

The following samples were analyzed in this batch:

1305777-10B	1305777-12B	1305777-13B
1305777-14B	1305777-15B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70114** Instrument ID **SV-5** Method: **SW8270**

MBLK Sample ID: **SBLKS2-130519-70114** Units: **µg/Kg** Analysis Date: **5/22/2013 09:53 AM**

Client ID: Run ID: **SV-5_130522A** SeqNo: **3225811** Prep Date: **5/20/2013** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	170								
2,4,6-Trichlorophenol	U	170								
2,4-Dichlorophenol	U	170								
2,4-Dimethylphenol	U	170								
2,4-Dinitrophenol	U	170								
2-Chlorophenol	U	170								
Acenaphthene	U	170								
Anthracene	U	170								
Benz(a)anthracene	U	170								
Benzo(a)pyrene	U	170								
Benzo(b)fluoranthene	U	170								
Benzo(k)fluoranthene	U	170								
Chrysene	U	170								
Dibenz(a,h)anthracene	U	170								
Fluoranthene	U	170								
Fluorene	U	170								
Naphthalene	U	170								
Nitrobenzene	U	170								
Pentachlorophenol	U	170								
Phenanthrene	U	170								
Phenol	U	170								
Pyrene	U	170								
<i>Surr: 2,4,6-Tribromophenol</i>	2911	170	3333	0	87.3	36-126	0			
<i>Surr: 2-Fluorobiphenyl</i>	2658	170	3333	0	79.7	43-125	0			
<i>Surr: 2-Fluorophenol</i>	2872	170	3333	0	86.2	37-125	0			
<i>Surr: 4-Terphenyl-d14</i>	4149	170	3333	0	124	32-125	0			
<i>Surr: Nitrobenzene-d5</i>	3086	170	3333	0	92.6	37-125	0			
<i>Surr: Phenol-d6</i>	2763	170	3333	0	82.9	40-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70114** Instrument ID **SV-5** Method: **SW8270**

LCS				Sample ID: SLCSS2-130519-70114		Units: µg/Kg		Analysis Date: 5/22/2013 10:15 AM		
Client ID:		Run ID: SV-5_130522A			SeqNo:3225812		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3151	170	3333	0	94.5	55-120				
2,4,6-Trichlorophenol	3056	170	3333	0	91.7	55-120				
2,4-Dichlorophenol	2831	170	3333	0	84.9	55-120				
2,4-Dimethylphenol	2951	170	3333	0	88.5	55-125				
2,4-Dinitrophenol	2772	170	3333	0	83.2	40-125				
2-Chlorophenol	2743	170	3333	0	82.3	55-120				
Acenaphthene	1410	170	1667	0	84.6	55-120				
Anthracene	1372	170	1667	0	82.3	55-120				
Benz(a)anthracene	1414	170	1667	0	84.8	55-125				
Benzo(a)pyrene	1341	170	1667	0	80.4	55-120				
Benzo(b)fluoranthene	1747	170	1667	0	105	55-125				
Benzo(k)fluoranthene	1427	170	1667	0	85.6	55-130				
Chrysene	1526	170	1667	0	91.6	55-125				
Dibenz(a,h)anthracene	1321	170	1667	0	79.2	55-120				
Fluoranthene	1283	170	1667	0	77	55-125				
Fluorene	1665	170	1667	0	99.9	55-120				
Naphthalene	1373	170	1667	0	82.4	55-120				
Nitrobenzene	1489	170	1667	0	89.3	55-120				
Pentachlorophenol	2968	170	3333	0	89	50-135				
Phenanthrene	1583	170	1667	0	95	55-120				
Phenol	2903	170	3333	0	87.1	50-120				
Pyrene	1602	170	1667	0	96.1	55-125				
Surr: 2,4,6-Tribromophenol	3024	170	3333	0	90.7	36-126		0		
Surr: 2-Fluorobiphenyl	3118	170	3333	0	93.6	43-125		0		
Surr: 2-Fluorophenol	3495	170	3333	0	105	37-125		0		
Surr: 4-Terphenyl-d14	4137	170	3333	0	124	32-125		0		
Surr: Nitrobenzene-d5	3104	170	3333	0	93.1	37-125		0		
Surr: Phenol-d6	3079	170	3333	0	92.4	40-125		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

WorkOrder: 1305777
InstrumentID: Balance1
Test Code: MOIST_SW3550
Test Number: SW3550
Test Name: Moisture

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: wt%

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	Percent Moisture	MOIST	0	0.010	0.010

WorkOrder: 1305777
InstrumentID: FID-7
Test Code: 8015M_DRO_S
Test Number: SW8015M
Test Name: TPH (DRO) - 8015C

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	DRO (>C10 - C28)	TPHDIESEL	0.47	0.50	1.7
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0

WorkOrder: 1305777
InstrumentID: FID-8
Test Code: 8015M_DRO_S
Test Number: SW8015M
Test Name: TPH (DRO) - 8015C

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	DRO (>C10 - C28)	TPHDIESEL	0.56	0.50	1.7
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0

WorkOrder: 1305777

InstrumentID: SV-3

Test Code: 8270_S

Test Number: SW8270

Test Name: Semivolatiles

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	2,4,5-Trichlorophenol	95-95-4	0.075	0.020	0.17
A	2,4,6-Trichlorophenol	88-06-2	0.071	0.020	0.17
A	2,4-Dichlorophenol	120-83-2	0.071	0.025	0.17
A	2,4-Dimethylphenol	105-67-9	0.074	0.035	0.17
A	2,4-Dinitrophenol	51-28-5	0.069	0.020	0.17
A	2-Chlorophenol	95-57-8	0.070	0.062	0.17
A	Acenaphthene	83-32-9	0.077	0.020	0.17
A	Anthracene	120-12-7	0.083	0.020	0.17
A	Benz(a)anthracene	56-55-3	0.082	0.020	0.17
A	Benzo(a)pyrene	50-32-8	0.075	0.020	0.17
A	Benzo(b)fluoranthene	205-99-2	0.060	0.020	0.17
A	Benzo(k)fluoranthene	207-08-9	0.10	0.020	0.17
A	Chrysene	218-01-9	0.084	0.020	0.17
A	Dibenz(a,h)anthracene	53-70-3	0.074	0.020	0.17
A	Fluoranthene	206-44-0	0.085	0.020	0.17
A	Fluorene	86-73-7	0.079	0.020	0.17
A	Naphthalene	91-20-3	0.077	0.020	0.17
A	Nitrobenzene	98-95-3	0.081	0.020	0.17
A	Pentachlorophenol	87-86-5	0.064	0.020	0.17
A	Phenanthrene	85-01-8	0.081	0.020	0.17
A	Phenol	108-95-2	0.063	0.069	0.17
A	Pyrene	129-00-0	0.076	0.020	0.17
S	Surr: 2,4,6-Tribromophenol	118-79-6	0	0	0.17
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0.17
S	Surr: 2-Fluorophenol	367-12-4	0	0	0.17
S	Surr: 4-Terphenyl-d14	1718-51-0	0	0	0.17
S	Surr: Nitrobenzene-d5	4165-60-0	0	0	0.17
s	Surr: Phenol-d6	13127-88-3	0	0	0.17

WorkOrder: 1305777

InstrumentID: SV-5

Test Code: 8270_S

Test Number: SW8270

Test Name: Semivolatiles

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	2,4,5-Trichlorophenol	95-95-4	0.069	0.020	0.17
A	2,4,6-Trichlorophenol	88-06-2	0.066	0.020	0.17
A	2,4-Dichlorophenol	120-83-2	0.071	0.025	0.17
A	2,4-Dimethylphenol	105-67-9	0.071	0.035	0.17
A	2,4-Dinitrophenol	51-28-5	0.041	0.020	0.17
A	2-Chlorophenol	95-57-8	0.071	0.062	0.17
A	Acenaphthene	83-32-9	0.073	0.020	0.17
A	Anthracene	120-12-7	0.076	0.020	0.17
A	Benz(a)anthracene	56-55-3	0.077	0.020	0.17
A	Benzo(a)pyrene	50-32-8	0.066	0.020	0.17
A	Benzo(b)fluoranthene	205-99-2	0.062	0.020	0.17
A	Benzo(k)fluoranthene	207-08-9	0.087	0.020	0.17
A	Chrysene	218-01-9	0.079	0.020	0.17
A	Dibenz(a,h)anthracene	53-70-3	0.066	0.020	0.17
A	Fluoranthene	206-44-0	0.071	0.020	0.17
A	Fluorene	86-73-7	0.074	0.020	0.17
A	Naphthalene	91-20-3	0.075	0.020	0.17
A	Nitrobenzene	98-95-3	0.079	0.020	0.17
A	Pentachlorophenol	87-86-5	0.056	0.020	0.17
A	Phenanthrene	85-01-8	0.076	0.020	0.17
A	Phenol	108-95-2	0.069	0.069	0.17
A	Pyrene	129-00-0	0.077	0.020	0.17
S	Surr: 2,4,6-Tribromophenol	118-79-6	0	0	0.17
S	Surr: 2-Fluorobiphenyl	321-60-8	0	0	0.17
S	Surr: 2-Fluorophenol	367-12-4	0	0	0.17
S	Surr: 4-Terphenyl-d14	1718-51-0	0	0	0.17
S	Surr: Nitrobenzene-d5	4165-60-0	0	0	0.17
s	Surr: Phenol-d6	13127-88-3	0	0	0.17

WorkOrder: 1305777

InstrumentID: VOA5

Test Code: 8260_S

Test Number: SW8260

Test Name: Volatiles - SW8260C

**METHOD DETECTION /
REPORTING LIMITS**

Matrix: Solid

Units: mg/Kg

Type	Analyte	CAS	DCS	MDL	Unadjusted MQL
A	Benzene	71-43-2	0.0010	0.00060	0.0050
A	Ethylbenzene	100-41-4	0.0010	0.00090	0.0050
A	Isopropylbenzene	98-82-8	0.0010	0.0010	0.0050
A	m,p-Xylene	179601-23-1	0.0021	0.0017	0.010
A	o-Xylene	95-47-6	0.0010	0.0010	0.0050
A	Styrene	100-42-5	0.0010	0.00060	0.0050
A	Toluene	108-88-3	0.0011	0.00070	0.0050
M	Xylenes, Total	1330-20-7	0.0031	0.0017	0.010
S	Surr: 1,2-Dichloroethane-d4	17060-07-0	0	0	0
S	Surr: 4-Bromofluorobenzene	460-00-4	0	0	0
S	Surr: Dibromofluoromethane	1868-53-7	0	0	0
S	Surr: Toluene-d8	2037-26-5	0	0	0

ALS Environmental

Date: 23-May-13

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70112A** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS3-130519-70112A				Units: mg/Kg		Analysis Date: 5/20/2013 08:58 PM			
Client ID:	Run ID: FID-7_130519B				SeqNo: 3225712		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	3.449	0	3.3	0	105	60-135	0			

LCS	Sample ID: FLCSS3-130519-70112A				Units: mg/Kg		Analysis Date: 5/20/2013 09:22 PM			
Client ID:	Run ID: FID-7_130519B				SeqNo: 3225713		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	33.96	1.7	33.3	0	102	70-130				
<i>Surr: 2-Fluorobiphenyl</i>	3.583	0	3.3	0	109	60-135	0			

MS	Sample ID: 1305777-02BMS				Units: mg/Kg		Analysis Date: 5/20/2013 10:09 PM			
Client ID: SB#11 (2'-3')	Run ID: FID-7_130519B				SeqNo: 3225716		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	2594	1.7	33.22	2266	987	70-130				SEO
<i>Surr: 2-Fluorobiphenyl</i>	25.05	0	3.292	0	761	60-135	0			S

MSD	Sample ID: 1305777-02BMSD				Units: mg/Kg		Analysis Date: 5/20/2013 10:33 PM			
Client ID: SB#11 (2'-3')	Run ID: FID-7_130519B				SeqNo: 3225717		Prep Date: 5/19/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	2498	1.7	33.21	2266	699	70-130	2594	3.76	30	SEO
<i>Surr: 2-Fluorobiphenyl</i>	38.19	0	3.291	0	1160	60-135	25.05	41.5	30	SR

The following samples were analyzed in this batch:

1305777-01B	1305777-02B	1305777-03B
1305777-05B	1305777-07B	1305777-08B
1305777-09B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 1 of 13

Client: Environmental Resources Management
 Work Order: 1305777
 Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70124** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS1-130520-70124				Units: mg/Kg		Analysis Date: 5/21/2013 02:04 AM			
Client ID:	Run ID: FID-7_130520A				SeqNo: 3225646		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	3.216	0	3.3	0	97.5	60-135	0			

LCS	Sample ID: FLCSS1-130520-70124				Units: mg/Kg		Analysis Date: 5/21/2013 02:28 AM			
Client ID:	Run ID: FID-7_130520A				SeqNo: 3225647		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	36.8	1.7	33.3	0	111	70-130				
<i>Surr: 2-Fluorobiphenyl</i>	3.46	0	3.3	0	105	60-135	0			

MS	Sample ID: 1305777-15BMS				Units: mg/Kg		Analysis Date: 5/21/2013 02:28 AM			
Client ID: SB#4 (2'-3')	Run ID: FID-7_130520A				SeqNo: 3225650		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	4596	1.7	33.24	5104	-1530	70-130				SEO
<i>Surr: 2-Fluorobiphenyl</i>	118.9	0	3.295	0	3610	60-135	0			S

MSD	Sample ID: 1305777-15BMSD				Units: mg/Kg		Analysis Date: 5/21/2013 02:51 AM			
Client ID: SB#4 (2'-3')	Run ID: FID-7_130520A				SeqNo: 3225651		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	6344	1.7	33.23	5104	3730	70-130	4596	32	30	SREO
<i>Surr: 2-Fluorobiphenyl</i>	131.7	0	3.293	0	4000	60-135	118.9	10.2	30	S

The following samples were analyzed in this batch:

1305777-10B	1305777-12B	1305777-13B
1305777-14B	1305777-15B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70114** Instrument ID **SV-5** Method: **SW8270**

MBLK Sample ID: **SBLKS2-130519-70114** Units: **µg/Kg** Analysis Date: **5/22/2013 09:53 AM**

Client ID: Run ID: **SV-5_130522A** SeqNo: **3225811** Prep Date: **5/20/2013** DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	170								
2,4,6-Trichlorophenol	U	170								
2,4-Dichlorophenol	U	170								
2,4-Dimethylphenol	U	170								
2,4-Dinitrophenol	U	170								
2-Chlorophenol	U	170								
Acenaphthene	U	170								
Anthracene	U	170								
Benz(a)anthracene	U	170								
Benzo(a)pyrene	U	170								
Benzo(b)fluoranthene	U	170								
Benzo(k)fluoranthene	U	170								
Chrysene	U	170								
Dibenz(a,h)anthracene	U	170								
Fluoranthene	U	170								
Fluorene	U	170								
Naphthalene	U	170								
Nitrobenzene	U	170								
Pentachlorophenol	U	170								
Phenanthrene	U	170								
Phenol	U	170								
Pyrene	U	170								
<i>Surr: 2,4,6-Tribromophenol</i>	2911	170	3333	0	87.3	36-126	0			
<i>Surr: 2-Fluorobiphenyl</i>	2658	170	3333	0	79.7	43-125	0			
<i>Surr: 2-Fluorophenol</i>	2872	170	3333	0	86.2	37-125	0			
<i>Surr: 4-Terphenyl-d14</i>	4149	170	3333	0	124	32-125	0			
<i>Surr: Nitrobenzene-d5</i>	3086	170	3333	0	92.6	37-125	0			
<i>Surr: Phenol-d6</i>	2763	170	3333	0	82.9	40-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70114** Instrument ID **SV-5** Method: **SW8270**

LCS				Sample ID: SLCSS2-130519-70114		Units: µg/Kg		Analysis Date: 5/22/2013 10:15 AM		
Client ID:		Run ID: SV-5_130522A			SeqNo:3225812		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3151	170	3333	0	94.5	55-120				
2,4,6-Trichlorophenol	3056	170	3333	0	91.7	55-120				
2,4-Dichlorophenol	2831	170	3333	0	84.9	55-120				
2,4-Dimethylphenol	2951	170	3333	0	88.5	55-125				
2,4-Dinitrophenol	2772	170	3333	0	83.2	40-125				
2-Chlorophenol	2743	170	3333	0	82.3	55-120				
Acenaphthene	1410	170	1667	0	84.6	55-120				
Anthracene	1372	170	1667	0	82.3	55-120				
Benz(a)anthracene	1414	170	1667	0	84.8	55-125				
Benzo(a)pyrene	1341	170	1667	0	80.4	55-120				
Benzo(b)fluoranthene	1747	170	1667	0	105	55-125				
Benzo(k)fluoranthene	1427	170	1667	0	85.6	55-130				
Chrysene	1526	170	1667	0	91.6	55-125				
Dibenz(a,h)anthracene	1321	170	1667	0	79.2	55-120				
Fluoranthene	1283	170	1667	0	77	55-125				
Fluorene	1665	170	1667	0	99.9	55-120				
Naphthalene	1373	170	1667	0	82.4	55-120				
Nitrobenzene	1489	170	1667	0	89.3	55-120				
Pentachlorophenol	2968	170	3333	0	89	50-135				
Phenanthrene	1583	170	1667	0	95	55-120				
Phenol	2903	170	3333	0	87.1	50-120				
Pyrene	1602	170	1667	0	96.1	55-125				
Surr: 2,4,6-Tribromophenol	3024	170	3333	0	90.7	36-126		0		
Surr: 2-Fluorobiphenyl	3118	170	3333	0	93.6	43-125		0		
Surr: 2-Fluorophenol	3495	170	3333	0	105	37-125		0		
Surr: 4-Terphenyl-d14	4137	170	3333	0	124	32-125		0		
Surr: Nitrobenzene-d5	3104	170	3333	0	93.1	37-125		0		
Surr: Phenol-d6	3079	170	3333	0	92.4	40-125		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70114** Instrument ID **SV-5** Method: **SW8270**

MS				Sample ID: 1305777-12BMS			Units: µg/Kg		Analysis Date: 5/22/2013 01:01 PM	
Client ID: Equipment Blank				Run ID: SV-5_130522A			SeqNo: 3225815		Prep Date: 5/20/2013	
							DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3065	170	3327	0	92.1	55-120				
2,4,6-Trichlorophenol	2844	170	3327	0	85.5	55-120				
2,4-Dichlorophenol	2692	170	3327	0	80.9	55-120				
2,4-Dimethylphenol	2776	170	3327	0	83.4	55-125				
2,4-Dinitrophenol	2278	170	3327	0	68.5	40-125				
2-Chlorophenol	2587	170	3327	0	77.8	55-120				
Acenaphthene	1346	170	1663	0	80.9	55-120				
Anthracene	1388	170	1663	0	83.4	55-120				
Benz(a)anthracene	1417	170	1663	0	85.2	55-125				
Benzo(a)pyrene	1282	170	1663	0	77.1	55-120				
Benzo(b)fluoranthene	1504	170	1663	0	90.4	55-125				
Benzo(k)fluoranthene	1373	170	1663	0	82.5	55-130				
Chrysene	1475	170	1663	0	88.7	55-125				
Dibenz(a,h)anthracene	1286	170	1663	0	77.3	55-120				
Fluoranthene	1258	170	1663	0	75.6	55-125				
Fluorene	1489	170	1663	0	89.5	55-120				
Naphthalene	1288	170	1663	0	77.4	55-120				
Nitrobenzene	1342	170	1663	0	80.7	55-120				
Pentachlorophenol	2620	170	3327	0	78.8	50-135				
Phenanthrene	1434	170	1663	0	86.2	55-120				
Phenol	2644	170	3327	0	79.5	50-120				
Pyrene	1653	170	1663	0	99.4	55-125				
Surr: 2,4,6-Tribromophenol	2689	170	3327	0	80.8	36-126		0		
Surr: 2-Fluorobiphenyl	2798	170	3327	0	84.1	43-125		0		
Surr: 2-Fluorophenol	3204	170	3327	0	96.3	37-125		0		
Surr: 4-Terphenyl-d14	4113	170	3327	0	124	32-125		0		
Surr: Nitrobenzene-d5	2823	170	3327	0	84.9	37-125		0		
Surr: Phenol-d6	2922	170	3327	0	87.8	40-125		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
 Work Order: 1305777
 Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **70114** Instrument ID **SV-5** Method: **SW8270**

MSD				Sample ID: 1305777-12BMSD			Units: µg/Kg		Analysis Date: 5/22/2013 01:24 PM	
Client ID: Equipment Blank				Run ID: SV-5_130522A			SeqNo: 3225816		Prep Date: 5/20/2013	
							DF: 1			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	2935	170	3328	0	88.2	55-120	3065	4.31	30	
2,4,6-Trichlorophenol	2806	170	3328	0	84.3	55-120	2844	1.33	30	
2,4-Dichlorophenol	2628	170	3328	0	79	55-120	2692	2.41	30	
2,4-Dimethylphenol	2757	170	3328	0	82.9	55-125	2776	0.687	30	
2,4-Dinitrophenol	2565	170	3328	0	77.1	40-125	2278	11.9	30	
2-Chlorophenol	2554	170	3328	0	76.7	55-120	2587	1.29	30	
Acenaphthene	1326	170	1664	0	79.7	55-120	1346	1.47	30	
Anthracene	1510	170	1664	0	90.8	55-120	1388	8.45	30	
Benz(a)anthracene	1386	170	1664	0	83.3	55-125	1417	2.22	30	
Benzo(a)pyrene	1267	170	1664	0	76.1	55-120	1282	1.19	30	
Benzo(b)fluoranthene	1512	170	1664	0	90.9	55-125	1504	0.542	30	
Benzo(k)fluoranthene	1353	170	1664	0	81.3	55-130	1373	1.48	30	
Chrysene	1402	170	1664	0	84.3	55-125	1475	5.06	30	
Dibenz(a,h)anthracene	1253	170	1664	0	75.3	55-120	1286	2.66	30	
Fluoranthene	1370	170	1664	0	82.3	55-125	1258	8.48	30	
Fluorene	1433	170	1664	0	86.1	55-120	1489	3.86	30	
Naphthalene	1286	170	1664	0	77.3	55-120	1288	0.161	30	
Nitrobenzene	1323	170	1664	0	79.5	55-120	1342	1.41	30	
Pentachlorophenol	2870	170	3328	0	86.3	50-135	2620	9.11	30	
Phenanthrene	1543	170	1664	0	92.8	55-120	1434	7.36	30	
Phenol	2519	170	3328	0	75.7	50-120	2644	4.84	30	
Pyrene	1577	170	1664	0	94.8	55-125	1653	4.69	30	
Surr: 2,4,6-Tribromophenol	2718	170	3328	0	81.7	36-126	2689	1.08	30	
Surr: 2-Fluorobiphenyl	2689	170	3328	0	80.8	43-125	2798	3.98	30	
Surr: 2-Fluorophenol	3147	170	3328	0	94.6	37-125	3204	1.79	30	
Surr: 4-Terphenyl-d14	3917	170	3328	0	118	32-125	4113	4.89	30	
Surr: Nitrobenzene-d5	2761	170	3328	0	83	37-125	2823	2.23	30	
Surr: Phenol-d6	2865	170	3328	0	86.1	40-125	2922	1.95	30	

The following samples were analyzed in this batch:

1305777-01B	1305777-02B	1305777-03B
1305777-05B	1305777-07B	1305777-08B
1305777-09B	1305777-10B	1305777-12B
1305777-13B	1305777-14B	1305777-15B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
 Work Order: 1305777
 Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147609** Instrument ID **VOA5** Method: **SW8260**

MBLK	Sample ID: VBLKS1-052013-R147609				Units: µg/Kg		Analysis Date: 5/20/2013 10:17 AM			
Client ID:	Run ID: VOA5_130520A				SeqNo: 3221592		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
Isopropylbenzene	U	5.0								
m,p-Xylene	U	10								
o-Xylene	U	5.0								
Styrene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	10								
Surr: 1,2-Dichloroethane-d4	46.29	0	50	0	92.6	70-128	0			
Surr: 4-Bromofluorobenzene	49.14	0	50	0	98.3	73-126	0			
Surr: Dibromofluoromethane	48.95	0	50	0	97.9	71-128	0			
Surr: Toluene-d8	49.72	0	50	0	99.4	73-127	0			

LCS	Sample ID: VLCSS1-052013-R147609				Units: µg/Kg		Analysis Date: 5/20/2013 09:08 AM			
Client ID:	Run ID: VOA5_130520A				SeqNo: 3221590		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	54.57	5.0	50	0	109	79-120				
Ethylbenzene	56.12	5.0	50	0	112	80-122				
Isopropylbenzene	57.24	5.0	50	0	114	72-127				
m,p-Xylene	112.7	10	100	0	113	79-122				
o-Xylene	56.87	5.0	50	0	114	80-123				
Styrene	55.51	5.0	50	0	111	78-124				
Toluene	55.56	5.0	50	0	111	79-120				
Xylenes, Total	169.5	10	150	0	113	80-120				
Surr: 1,2-Dichloroethane-d4	47.04	0	50	0	94.1	70-128	0			
Surr: 4-Bromofluorobenzene	50.05	0	50	0	100	73-126	0			
Surr: Dibromofluoromethane	50.55	0	50	0	101	71-128	0			
Surr: Toluene-d8	50.28	0	50	0	101	73-127	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
 Work Order: 1305777
 Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147609** Instrument ID **VOA5** Method: **SW8260**

LCSD	Sample ID: VLCSDS1-052013-R147609					Units: µg/Kg		Analysis Date: 5/20/2013 09:31 AM		
Client ID:	Run ID: VOA5_130520A				SeqNo: 3221591		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	55.51	5.0	50	0	111	79-120	54.57	1.72	30	
Ethylbenzene	55.85	5.0	50	0	112	80-122	56.12	0.491	30	
Isopropylbenzene	57.14	5.0	50	0	114	72-127	57.24	0.178	30	
m,p-Xylene	112.5	10	100	0	113	79-122	112.7	0.093	30	
o-Xylene	55.17	5.0	50	0	110	80-123	56.87	3.03	30	
Styrene	56.29	5.0	50	0	113	78-124	55.51	1.39	30	
Toluene	55.14	5.0	50	0	110	79-120	55.56	0.746	30	
Xylenes, Total	167.7	10	150	0	112	79-123	169.5	1.07	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	48.96	0	50	0	97.9	70-128	47.04	3.98	30	
<i>Surr: 4-Bromofluorobenzene</i>	49.41	0	50	0	98.8	73-126	50.05	1.28	30	
<i>Surr: Dibromofluoromethane</i>	49.24	0	50	0	98.5	71-128	50.55	2.63	30	
<i>Surr: Toluene-d8</i>	48.77	0	50	0	97.5	73-127	50.28	3.05	30	

MS	Sample ID: 1305777-01AMS					Units: µg/Kg		Analysis Date: 5/20/2013 01:47 PM		
Client ID: SB#1 (2'-3')		Run ID: VOA5_130520A			SeqNo:3221801		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	40.84	5.0	50	0	81.7	79-120				
Ethylbenzene	34.29	5.0	50	0	68.6	80-122				S
Isopropylbenzene	32.73	5.0	50	0	65.5	72-127				S
m,p-Xylene	70.18	10	100	0	70.2	79-122				S
o-Xylene	37.18	5.0	50	0	74.4	80-123				S
Styrene	35.11	5.0	50	0	70.2	78-124				S
Toluene	39.54	5.0	50	0	79.1	79-120				
Xylenes, Total	107.4	10	150	0	71.6	80-120				S
Surr: 1,2-Dichloroethane-d4	47.68	0	50	0	95.4	70-128		0		
Surr: 4-Bromofluorobenzene	44.09	0	50	0	88.2	73-126		0		
Surr: Dibromofluoromethane	48.39	0	50	0	96.8	71-128		0		
Surr: Toluene-d8	51.29	0	50	0	103	73-127		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management

Work Order: 1305777

Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147609**

Instrument ID **VOA5**

Method: **SW8260**

MSD	Sample ID: 1305777-01AMSD				Units: µg/Kg		Analysis Date: 5/20/2013 02:10 PM			
Client ID: SB#1 (2'-3')		Run ID: VOA5_130520A			SeqNo:3221802		Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	39.69	5.0	50	0	79.4	79-120	40.84	2.85	30	
Ethylbenzene	30.35	5.0	50	0	60.7	80-122	34.29	12.2	30	S
Isopropylbenzene	26.57	5.0	50	0	53.1	72-127	32.73	20.8	30	S
m,p-Xylene	59.22	10	100	0	59.2	79-122	70.18	16.9	30	S
o-Xylene	32.14	5.0	50	0	64.3	80-123	37.18	14.6	30	S
Styrene	30.99	5.0	50	0	62	78-124	35.11	12.5	30	S
Toluene	35.62	5.0	50	0	71.2	79-120	39.54	10.4	30	S
Xylenes, Total	91.36	10	150	0	60.9	79-123	107.4	16.1	30	S
Surr: 1,2-Dichloroethane-d4	49.48	0	50	0	99	70-128	47.68	3.72	30	
Surr: 4-Bromofluorobenzene	44.71	0	50	0	89.4	73-126	44.09	1.41	30	
Surr: Dibromofluoromethane	48.77	0	50	0	97.5	71-128	48.39	0.793	30	
Surr: Toluene-d8	50.42	0	50	0	101	73-127	51.29	1.7	30	

The following samples were analyzed in this batch:

1305777-01A	1305777-02A	1305777-03A
1305777-05A	1305777-07A	1305777-08A
1305777-09A	1305777-10A	1305777-12A
1305777-13A	1305777-14A	1305777-15A
1305777-16A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
 Work Order: 1305777
 Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147658** Instrument ID **VOA5** Method: **SW8260**

MBLK	Sample ID: VBLKS1-052113-R147658			Units: µg/Kg			Analysis Date: 5/21/2013 08:51 AM			
Client ID:	Run ID: VOA5_130521A			SeqNo: 3222824			Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	U	10								
o-Xylene	U	5.0								
Xylenes, Total	U	10								
Surr: 1,2-Dichloroethane-d4	44.52	0	50	0	89	70-128	0			
Surr: 4-Bromofluorobenzene	49.42	0	50	0	98.8	73-126	0			
Surr: Dibromofluoromethane	48.75	0	50	0	97.5	71-128	0			
Surr: Toluene-d8	49.94	0	50	0	99.9	73-127	0			

LCS	Sample ID: VLCSS1-052113-R147658			Units: µg/Kg			Analysis Date: 5/21/2013 08:28 AM			
Client ID:	Run ID: VOA5_130521A			SeqNo: 3222823			Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	105.1	10	100	0	105	79-122				
o-Xylene	53.26	5.0	50	0	107	80-123				
Xylenes, Total	158.4	10	150	0	106	80-120				
Surr: 1,2-Dichloroethane-d4	46.88	0	50	0	93.8	70-128	0			
Surr: 4-Bromofluorobenzene	50.63	0	50	0	101	73-126	0			
Surr: Dibromofluoromethane	49.29	0	50	0	98.6	71-128	0			
Surr: Toluene-d8	50.4	0	50	0	101	73-127	0			

MS	Sample ID: 1305709-13AMS			Units: µg/Kg			Analysis Date: 5/21/2013 11:32 AM			
Client ID:	Run ID: VOA5_130521A			SeqNo: 3223218			Prep Date:		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	79.63	10	100	0	79.6	79-122				
o-Xylene	39.64	5.0	50	0	79.3	80-123				S
Xylenes, Total	119.3	10	150	0	79.5	80-120				S
Surr: 1,2-Dichloroethane-d4	49.17	0	50	0	98.3	70-128	0			
Surr: 4-Bromofluorobenzene	50.53	0	50	0	101	73-126	0			
Surr: Dibromofluoromethane	48.95	0	50	0	97.9	71-128	0			
Surr: Toluene-d8	49.6	0	50	0	99.2	73-127	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147658** Instrument ID **VOA5** Method: **SW8260**

MSD		Sample ID: 1305709-13AMSD				Units: µg/Kg		Analysis Date: 5/21/2013 11:55 AM		
Client ID:		Run ID: VOA5_130521A				SeqNo: 3223219		Prep Date:		DF: 1
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
m,p-Xylene	88.38	10	100	0	88.4	79-122	79.63	10.4	30	
o-Xylene	44.2	5.0	50	0	88.4	80-123	39.64	10.9	30	
Xylenes, Total	132.6	10	150	0	88.4	79-123	119.3	10.6	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	49.39	0	50	0	98.8	70-128	49.17	0.427	30	
<i>Surr: 4-Bromofluorobenzene</i>	50.15	0	50	0	100	73-126	50.53	0.774	30	
<i>Surr: Dibromofluoromethane</i>	48.63	0	50	0	97.3	71-128	48.95	0.661	30	
<i>Surr: Toluene-d8</i>	49.84	0	50	0	99.7	73-127	49.6	0.486	30	

The following samples were analyzed in this batch:

1305777-15A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147725** Instrument ID **Balance1** Method: **SW3550** **(Dissolve)**

DUP Sample ID: **1305777-09BDUP** Units: **wt%** Analysis Date: **5/21/2013 02:00 PM**

Client ID: **SB#3 (2'-3')** Run ID: **BALANCE1_130521C** SeqNo: **3224889** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	11.95	0.010					12.52	4.68	20	

The following samples were analyzed in this batch:

1305777-01B	1305777-02B	1305777-03B
1305777-05B	1305777-07B	1305777-08B
1305777-09B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Work Order: 1305777
Project: Gallup NM # PN 0097134

QC BATCH REPORT

Batch ID: **R147733** Instrument ID **Balance1** Method: **SW3550** **(Dissolve)**

DUP Sample ID: **1305676-12CDUP** Units: **wt%** Analysis Date: **5/21/2013 03:00 PM**

Client ID: Run ID: **BALANCE1_130521E** SeqNo: **3225031** Prep Date: DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	23.54	0.010					24.04	2.1	20	

The following samples were analyzed in this batch:

1305777-10B	1305777-12B	1305777-13B
1305777-14B	1305777-15B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Environmental Resources Management
Project: Gallup NM # PN 0097134
WorkOrder: 1305777

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram
mg/Kg-dry wt%	Milligrams per Kilogram - Dry weight corrected

Sample Receipt Checklist

Client Name: **ERMSW-HOU**

Date/Time Received: **17-May-13 09:00**

Work Order: **1305777**

Received by: **PMG**

Checklist completed by *Parash M. Ciga*
eSignature

17-May-13
Date

Reviewed by: *Bernadette D. Fini*
eSignature

17-May-13
Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>0.3c/0.3c C/U</u> <u>IR1</u>		
Cooler(s)/Kit(s):	<u>4082</u>		
Date/Time sample(s) sent to storage:	<u>5/17/13 14:50</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes: Date of collection for Equipment blank logged in from jars. Trip blank received not listed on chain

Client Contacted:

Date Contacted:

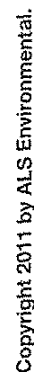
Person Contacted:

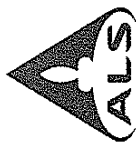
Contacted By:

Regarding:

Comments:

CorrectiveAction:





Cincinnati, OH
+1 513 733 5336
Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511
Holland, MI
+1 616 399 6070

Chain of Custody Form

Houston, TX
+1 281 530 5656
Middletown, PA
+1 717 944 5541

Spring City, PA
+1 610 948 4903
Salt Lake City, UT
+1 801 266 7700
South Charleston, WV
+1 304 356 3168
York, PA
+1 717 505 5280

Environmental

Page of

COC ID: 81027

Customer Information				Project Information				ALS Project Manager:				ALS Work Order #:					
Purchase Order				Project Name				Gallup NM				Parameter/Method Request for Analysis					
Work Order				Project Number				PN 0097134				VOC (8260) Select					
Company Name				Environmental Resources Management				Environmental Resources Management				SVOC (8270) Select					
Send Report To				Don Whitley				Don Whitley				DRO (8015)					
Address				15810 Park Ten Place Suite 300				15810 Park Ten Place Suite 300				Moisture					
City/State/Zip				Houston, TX 77084				Houston, TX 77084									
Phone				(281) 600-1000				(281) 600-1000									
Fax				(281) 600-1001				(281) 600-1001									
e-Mail Address																	
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB # 2 (4'-5')	5-15-2013	8:30am	Soil	N/A	2	X	X	X	X							
2	Equipment Blank		8:40am	Sand	N/A	2											
3	SB # 7 (2'-3')		8:45am	Soil													
4	SB # 10 (2'-3')		10:25am														
5	SB # 4 (2'-3')		11:19am														
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
Vlad Labovskiy				<input checked="" type="checkbox"/> 5-10 WK Days	<input type="checkbox"/> 2 WK Days	<input type="checkbox"/> 24 Hour	
Relinquished by:		Date:	Time:	Notes: 5/17/13 JSD/JAT			
Vlad Labovskiy		5-16-2013	13:00				
Relinquished by:		Date:	Time:				
Logged by (Laboratory):		Date:	Time:				
Preservative Key:	1-HCl	2-HNO ₃	3-H ₂ SO ₄	4-NaOH	5-Na ₂ S ₂ O ₃	6-NaHSO ₄	7-Other
							8-4°C
							9-5035

QC Package: (Check One Box Below)	
<input type="checkbox"/> Level II Std OC	<input type="checkbox"/> TRRP Checklist
<input type="checkbox"/> Level III Std QC/RAW Data	<input type="checkbox"/> TRRP Level IV
<input type="checkbox"/> Level IV SW/946/CLP	
<input type="checkbox"/> Other / EDD	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.

3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.

FedEx
Tracking
Number

8020 3307 1320

1 From
Date 05-16-2013
Sender's Name VLAD LABEUSKI Phone 281 639 0652
Company
Address
City HOUSTON State TX ZIP
Dept./Floor/Suite/Room

2 Your Internal Billing Reference

3 To
Recipient's Name CLIENT SERVICES Phone 281 530-5856
Company ALS LABORATORY GROUP
Address 10450 STANCLIFF RD STE 210
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City HOUSTON State TX ZIP 77099-4338

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.



8020 3307 1320

0215
Recipient's Copy

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.Packages up to 150 lbs.
For packages over 150 lbs, use the
FedEx Express Freight US Airbill.

Next Business Day	Two Business Days
<input type="checkbox"/> FedEx First Overnight Fastest and most secure shipping delivery to select locations. Higher rates apply. Will be delivered on Monday unless SATURDAY Delivery is selected.	<input type="checkbox"/> FedEx 2Day A.M. Second business morning. Saturday Delivery NOT available.
<input checked="" type="checkbox"/> FedEx Priority Overnight Next business morning. * Priority shipments will be delivered on Monday unless SATURDAY Delivery is selected.	<input type="checkbox"/> FedEx 2Day Second business afternoon. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
<input type="checkbox"/> FedEx Standard Overnight Next business afternoon. Saturday Delivery NOT available.	<input type="checkbox"/> FedEx Express Saver Third business day. Saturday Delivery NOT available.

5 Packaging * Declared value limit \$500.
☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for: FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☒ No Signature Required
Package may be left without
obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address
may sign for delivery. Fee applies.

☐ Indirect Signature
If no one is available at recipient's
address, someone at a neighboring
address may sign for delivery for
residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?
One line must be checked.
☒ No ☐ Yes As per attached
Shipper's Declaration. ☐ Yes
Employer's Declaration
not required.

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging
or placed in a FedEx Express shipping box.

☐ Dry Ice
Dry Ice, 3. UN 1845 x kg
☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip.
Acct. No. ☐

☐ Sender Acct. No. in Section
Two to label. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages 2 Total Weight 67 lbs. Credit Card Auth.

Your liability is limited to US\$100 unless you declare a higher value. See the current FedEx Services Guide for details.

Rev. Date 2/12 • Form 1155134 • © 1996-2012 FedEx • PRINTED IN U.S.A. SRS



ALS Environmental

10450 Stancliff Rd Suite 210
Houston, Texas 77099
Tel. 281 639 0652
Fax 281 530 5887

CUSTODY SEAL

Date: 05-16-2013 Time: 13:00
Name: V. LABEUSKI
Company: ERM

FedEx
Tracking
Number

8020 3307 1320

1 From
Date 05-16-2013
Sender's Name VLAD LABEWSKI Phone 281 530 6652
Company
Address
City HOUSTON State TX ZIP 77095-4326

2 Your Internal Billing Reference

3 To
Recipient's Name CLIENT SERVICES Phone 281 530-5456
Company ALS LABORATORY GROUP
Address 10450 STANCLIFF RD STE 210
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City HOUSTON State TX ZIP 77095-4326

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

8020 3307 1320

4 Express Package Service

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs. use the
FedEx Express Freight US Airbill.

Next Business Day
☒ FedEx First Overnight
FedEx Priority Overnight
FedEx Standard Overnight

2 or 3 Business Days
☐ FedEx 2Day A.M.
☐ FedEx 2Day
☐ FedEx Express Saver

5 Packaging
☐ FedEx Envelope
☐ FedEx Pak
☐ FedEx Box
☐ FedEx Tube
☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
☒ No Signature Required
☐ Direct Signature
☐ Indirect Signature

Does this shipment contain dangerous goods?
☒ No
☐ Yes
☐ Yes
☐ Dry Ice
☐ Cargo Aircraft Only

7 Payment Bill to:
Sender
Recipient
Third Party
Credit Card
Cash/Check

Total Packages 2 Total Weight 67 lbs

Your liability is limited to \$500 unless you declare a higher value. See the current FedEx Service Guide for details.

Rev. Date 2/12 • Part 750134 • ©1994-2012 FedEx • PRINTED IN U.S.A. 555



ALS Environmental

10450 Stancliff Rd, Suite 210
Houston, Texas 77099
Tel. 281 530 6650
Fax: 281 530 5887

CUSTODY SEAL

Date: 05-16-2013 Time: 13:00
Name: V. LABEWSKI
Company: ERM

Chavez, Carl J, EMNRD

From: Larsen, Thurman <Thurman.Larsen@wnr.com>
Sent: Tuesday, August 20, 2013 4:53 PM
To: Chavez, Carl J, EMNRD; VonGonten, Glenn, EMNRD
Cc: Allen, Ann; Hains, Allen; Dhawan, Neelam, NMENV; Kieling, John, NMENV; Blaine, Tom, NMENV; Cobrain, Dave, NMENV
Subject: Gallup Hydrocarbon Seep - Spill Response Update
Attachments: Gallup Hydrocarbon Seep - Spill Response Update.pdf

Carl,

Western Refining Southwest, Inc. – Gallup Refinery provided notice of discovery of an apparent seep of hydrocarbon to the west of Tanks 101 and 102 on June 26, 2013 and submitted a Form C-141 on July 11, 2013 informing of initial spill response actions taken. The attached report provides an update on the on-going spill response actions.

Regards,

Beck Larsen\
Environmental Engineer
Western Refining



August 20, 2013

Via Email and Certified Mail, Return Receipt Requested

Mr. Carl Chavez
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

**Re: Hydrocarbon Release Notification Report
Western Refining Company Southwest, Inc. ("Western")
Gallup Refinery
AP-111
EPA ID #NMD000333211**

Dear Mr. Chavez:

Western Refining Southwest, Inc. – Gallup Refinery provided notice of the discovery of an apparent seep of hydrocarbons to the west of Tanks 101 and 102 on June 26, 2013 and submitted a Form C-141 on July 11, 2013 informing of initial spill response actions taken. This letter report provides an update on the on-going spill response actions, including a map of the subject area (Figure 1) and all currently available information pertaining to the release (e.g., media affected, analytical reports and estimated recovered volumes of groundwater/hydrocarbons).

Actions Completed To-Date

As noted in the C-141 Form, a series of 14 excavations were completed in the area of the seep to the west and south of Tanks T-101 and T-102. The hydrocarbons appear to be migrating through silty fine sand deposits that overlie a thick low permeability clay/siltstone, which isolates the underlying uppermost aquifer (Sonsela Aquifer). Six of the excavations were initially left open to facilitate recovery of hydrocarbons and groundwater. Subsequently, a six-inch PVC screen was placed in each of these same six excavations and they were backfilled with coarse gravel to create temporary sumps to allow for safe, continued recovery of liquids. The groundwater and any hydrocarbons that enter the sumps are removed with a vacuum truck and placed into the wastewater treatment system up-stream of the API Separator. The volume of total liquids (groundwater and hydrocarbons) recovered from June 26, 2013 through August 13, 2013 is estimated to be 27,000 gallons. The initial material recovered was estimated to be 50% water and 50% hydrocarbon; however, the percentage of hydrocarbon reduced significantly over the first couple of weeks. Since the area has been receiving significant rainfall, the recovered material is now primarily water.

Efforts to identify the source of the hydrocarbons have included the following actions:

1. Distillation analyses of two hydrocarbon samples collected near the seep (Seep 1 and Seep 2);
2. Dye tracer tests on the process sewer system;
3. Completion of five hand-auger borings to the west and northwest of the seep location with temporary well completions;
4. Installation of 22 soil borings with temporary well completions to the south of the seep location, including in the general vicinity of a recent release of gasoline from marketing tank MT-3, which was reported on May 7, 2013 (Form C-141 submitted May 16, 2013); and
5. Collection and laboratory analysis of one product sample, one soil sample from the exaction stock pile, one soil sample from drill cuttings, and six groundwater samples from temporary well completions.

The results of the two new distillation analyses were plotted on the enclosed graph (Figure 3) and the laboratory reports are also enclosed. The graph indicates that the hydrocarbon recovered at the location of the seep (identified on the graph as Seep Sample 1 and Seep Sample 2 and in the lab report as underground petroleum sample deposit #1 and #2) has a mixture of gasoline through light gas-oil range hydrocarbons, with a majority of the sample consisting of diesel range hydrocarbons. The distillation analysis of a crude sample collected from Tank T-101 in November 2011 is also plotted on Figure 3 and there is a clear distinction between the material found at the seep location and the crude oil processed at the refinery. The hydrocarbon recovered at the seeps and found in the soil borings is a clear liquid and does not resemble crude oil. In addition, the distillation results eliminate Tanks T-101 and T-102 (crude oil storage tanks) as a source of the release.

Two separate dye tests were conducted in the process sewer system. A dye was introduced into the sewer due east of the seep location near the bundle cleaning pad and a second dye was placed in the sewer to the southeast of the marketing tanks at the truck rack. In both instances, it took approximately eight days for the dye to be detected in the area of the seep. The dyes initially were not identified in the soil borings/temporary wells located further south, but only in the area where the seep was originally identified. During the most recent fluid gauging event on August 14th, a dye was observed in SB-1 and SB-16. The presence of dye in groundwater in the area of the seep indicates the potential for a release from the sewer system, but additional assessment will be required to confirm a release and locate any actual leaks.

The enclosed map (Figure 1) shows the locations of the five hand auger locations and 22 soil borings, which were completed as temporary monitoring wells to allow gauging of fluid levels and collection of groundwater samples for analysis. The boring logs and a table summarizing fluid level measurements (Table 1) are enclosed. As many of the borings/temporary wells indicate the presence of phase-separated hydrocarbon (PSH), groundwater samples were only collected for analysis from HA-1, HA-2, HA-3, HA-4, SB-18, and SB-19. A map of the measured thickness of PSH is enclosed as Figure 2. The groundwater samples were analyzed for total petroleum hydrocarbons (gasoline range, diesel range, and oil range) by EPA method 8015D. The results are summarized in Table 2. Gasoline range and diesel range organics were detected in all groundwater samples, with gasoline range being the dominant fraction in three of the four hand auger locations. The fourth hand auger location (HA-4) shows equal concentrations of gasoline range and diesel range organics, as does SB-18. A higher

concentration of diesel range organics as compared to gasoline range organics was detected in SB-19.

Waste characterization samples have been collected from the soils generated during excavation for the sumps and the drill cuttings from the temporary well installations. The analyses are enclosed for each and demonstrate the soils generated to-date are not characteristically hazardous, but do contain petroleum hydrocarbons.

Future Actions

Western will continue efforts to further characterize potential source areas, to recover PSH and to delineate the lateral extent of impacts to groundwater. These efforts will be accomplished by the following tasks.

- Further testing of the sewer system lines is being conducted to help locate any potential leaks. The results of leak detection surveys (e.g., *Tracer Tight*® and *HeliTek*®) will be used to help locate additional soil borings/temporary wells to define the lateral extent of any releases from the sewer system that may have contributed to the seep.
- Recovery operations at the six sumps will continue to remove any PSH and impacted groundwater that accumulates in the sumps.
- The ground level and top of casing elevations will be surveyed at the temporary well and sump locations. From this information and fluid level measurements, a potentiometric surface map will be prepared. This information will be used to help locate additional soil borings/temporary wells to define the lateral extent of the release.
- Additional soil borings/temporary wells will be installed for characterization and delineation purposes.

If there are any questions regarding the actions taken to-date or planned further actions, then please contact me at 505-722-0217. Please note Western reserves all applicable rights and defenses relevant to this matter.

Sincerely,



Beck Larsen
Environmental Engineer

SC/BL/

Enclosures
Copy Distribution List:

G. von Gonten, OCD
A. Allen, Western
A. Hains, Western
L. Gould, Western

N. Dhawan, NMED HWB
J. Kieling, NMED HWB
T. Blaine, NMED
D. Cobrain, NMED HWB

Figures



Aerial Map Source: Google Map, 05/03/2012.



LEGEND

- SB01 SOIL BORING / TEMPORARY WELL LOCATION
- HA1 HAND AUGER LOCATION
- EXCAVATION LOCATION
- S01 TEMPORARY SUMP

W Western Refining
GALLUP REFINERY

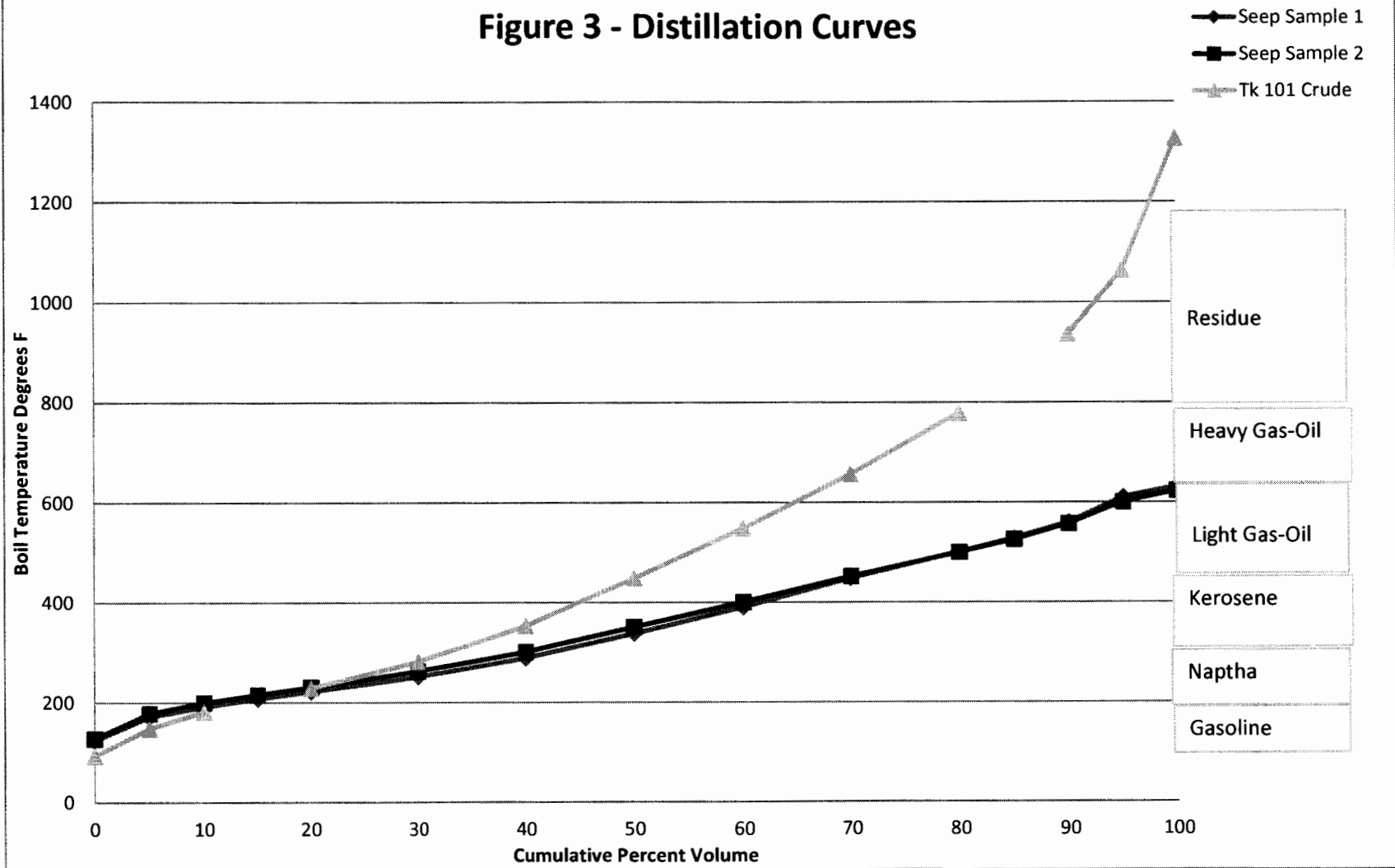
PROJ. NO.: Western Refining DATE: 08/13/13 FILE: WestRef-B159

FIGURE 1
LOCATION MAP OF
SOIL BORING / TEMPORARY WELL,
HAND AUGER AND EXCAVATION

RPS

Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298

Figure 3 - Distillation Curves



Tables

Table 1
Fluid Level Measurements
Gallup Refinery - Jamestown, New Mexico

LOC.	DATE	DEPTH TO PSH (ft BGL)	DEPTH TO GW (ft BGL)	PSH THICKNESS (feet)	Top of Casing (ft AGL)	COMMENTS
HA1	07/11/13	ND	4.90	0.00	5.80	
	07/12/13	ND	4.90	0.00	NM	
	07/17/13	ND	5.05	0.00	NM	
	08/14/13	ND	9.19	0.00	NM	Odor detected
HA2	07/12/13	ND	4.95	0.00	NM	
	07/17/13	ND	5.32	0.00	NM	
	08/14/13	ND	5.31	0.00	NM	Odor detected
HA3	07/12/13	ND	5.80	0.00	NM	
	07/17/13	ND	5.93	0.00	NM	
	08/14/13	ND	4.28	0.00	NM	Odor detected
HA4	07/12/13	ND	3.40	0.00	NM	PSH OBSERVED ON PROBE
	07/17/13	ND	3.53	0.00	NM	
	08/14/13	ND	4.94	0.00	NM	Odor detected
HA5	07/12/13	ND	5.50	0.00	NM	
	07/17/13	NM	NM		NM	BOREHOLE WAS DESTROYED
SB01	07/17/13	8.75	13.99	5.24	NM	
	07/25/13	8.18	13.88	5.70	2.67	
	08/14/13	9.88	9.91	0.03	2.67	Has reddish tint - trace of dye?
SB02	07/17/13	9.26	9.58	0.32	NM	
	07/25/13	8.85	9.14	0.29	0.83	
	08/14/13	8.74	9.12	0.38	0.83	
SB03	07/17/13	ND	11.40	0.00	NM	
	07/25/13	ND	10.63	0.00	2.21	
	08/14/13	ND	12.01	0.00	2.21	Odor detected
SB04	07/17/13	ND	12.87	0.00	NM	
	07/25/13	ND	12.23	0.00	0.75	
	08/14/13	ND	12.19	0.00	0.75	Odor detected
SB05	07/17/13	13.67	14.70	1.03	NM	
	07/25/13	13.27	14.19	0.92	1.21	
	08/14/13	13.66	13.75	0.09	1.21	
SB06	07/22/13	13.43	13.44	0.01	NM	No PSH observed during drilling
	07/25/13	13.33	13.34	0.01	0.67	
	08/14/13	ND	13.07	0.00	0.67	Odor detected
SB07	07/22/13	13.51	13.52	0.01	NM	No PSH observed during drilling
	07/25/13	13.45	13.46	0.01	1.33	
	08/14/13	ND	13.49	0.00	1.33	Odor detected
SB08	07/22/13	16.00	17.86	1.86	NM	
	07/25/13	15.92	17.80	1.88	1.88	
	08/14/13	16.65	18.80	2.15	1.88	

Table 1
Fluid Level Measurements
Gallup Refinery - Jamestown, New Mexico

LOC.	DATE	DEPTH TO PSH (ft BGL)	DEPTH TO GW (ft BGL)	PSH THICKNESS (feet)	Top of Casing (ft AGL)	COMMENTS
SB09	07/22/13	14.39	14.40	0.01	NM	PSH observed during drilling
	07/25/13	ND	14.40	0.00	2.25	
	08/14/13	ND	14.83	0.00	2.25	Odor detected
SB10	07/22/13	ND	8.29	0.00	NM	PSH observed during drilling at 5-6'
	07/25/13	ND	6.16	0.00	1.58	
	08/14/13	7.57	9.14	1.57	1.58	Odor detected
SB11	07/22/13	ND	ND	NA	NM	PSH observed during drilling
	07/25/13				3.00	Reset not measured
	08/14/13	14.06	14.08	0.02	3.00	Odor detected
SB12	07/22/13	11.96	11.97	0.01	NM	PSH observed during drilling
	07/25/13	ND	12.01	0.00	2.17	
	08/14/13	ND	14.72	0.00	2.17	Odor detected
SB13	07/22/13	ND	11.71	0.00	NM	Sheen observed during drilling
	07/25/13	ND	11.53	0.00	3.50	
	08/14/13	ND	14.75	0.00	3.50	Odor detected
SB14	07/25/13	ND	14.09	0.00	2.00	
	08/14/13	ND	15.7	0.00	2.00	Odor detected
SB15	07/25/13	ND	16.46	0.00	3.00	
	08/14/13	ND	18.54	0.00	3.00	Odor detected
SB16	07/25/13	9.54	12.70	3.16	1.50	
	08/14/13	10.76	11.36	0.60	1.50	Has reddish tint - trace of dye?
SB17	07/25/13	9.42	9.55	0.13	2.58	
	08/14/13	11.09	11.25	0.16	2.58	
SB18	07/25/13	ND	15.58	0.00	3.00	Sampled for TPH
	08/14/13	ND	17.54	0.00	3.00	Odor detected
SB19	07/25/13	ND	16.78	0.00	2.67	Sampled for TPH
	08/14/13	18.3	18.8	0.50	2.67	
SB20	07/25/13	10.62	13.24	2.62	3.00	
	08/14/13	12.88	16.3	3.42	3.00	
SB21	07/25/13	7.10	9.32	2.22	2.83	
	08/14/13	9.20	9.98	0.78	2.83	
SB22	07/25/13	4.89	7.99	3.10	3.00	
	08/14/13	6.77	7.91	1.14	3.00	

ND - no product detected

NM - not measured

Table 2
Groundwater Analytical Results Summary
Gallup Refinery - Jamestown, New Mexico

Analytes		HA-1	HA-2	HA-3	HA-4	SB-18	SB-19
Sample ID		1307892-001	1307892-002	1307892-003	1307892-004	1012096-01	1009356-02
Sample date		7/17/2013	7/17/2013	7/17/2013	7/17/2013	7/25/2013	7/25/2013
	Units						
Total Petroleum Hydrocarbons							
Gasoline Range Organics (GRO)	mg/L	19	16	25	17	73	19
Diesel Range Organics (DRO)	mg/L	3.3	3.1	4.8	17	73	30
Motor Oil Range Organics (MRO)	mg/L	<5	<5	<5	<5	<5	<5

Boring Logs

RPS

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: N/A
Drilling Rig: N/A
Drilling Method: Hand Auger
Sampling Method: Auger Head
Comments: N 35°29.346' W 108°25.782'

LOG OF BORING

Boring No.: HA1
Start Date: 7/10/2013 16:30
Finish Date: 7/10/2013 16:55

Total Depth: 7.5' bgl
Ground Water: Saturated @ 5' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N E

Depth (ft.)	Sampling						Recovery (%)	Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class			
0								Ground Surface	0
2							100	Silty Clay (CL) Low plasticity, soft, damp, reddish brown to brown, no odor	2
4									4
6							100	Silty Clay/Clayey Silt (CL/ML) Low plasticity, very soft, moist to saturated, brown grading to black, gravelly, bio odor, no phase-separated hydrocarbon	6
8								Total Depth = 7.5' BGL	8
10									10
12									12
14									14
16									16

Set temporary 1" Well
Screened: 2.5-7.5' bgl
Filter Pack: 1-7.5' bgl
Bentonite: 0-1' bgl
Stickup: 1.75'

RPS

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: N/A
Drilling Rig: N/A
Drilling Method: Hand Auger
Sampling Method: Auger Head
Comments: N 35°29.353' W 108°25.785'

LOG OF BORING

Boring No.: HA2
Start Date: 7/11/2013 08:40
Finish Date: 7/11/2013 09:40

Total Depth: 9' bgl
Ground Water: Saturated @ 4.75' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N E

Depth (ft.)	Sampling						Recovery (%)	Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class			
0								Ground Surface	0
2					15.4 86°F		100	Silty Clay (CL) Low plasticity, soft, damp, brown/reddish brown, no odor, damp	2
4				4.75'	15.6 86°F		100	Silty Clay (CL) Similar to above, moist to saturated at 4.75' bgl, gravelly, no odor	4
6					15.3 86°F		100	Silty Clay (CL) Similar to above with saturated sand seams, strong hydrocarbon odor, no phase-separated hydrocarbon	6
8									8
10					1250 86°F			Total Depth = 9' BGL	10
12								Set temporary 1" Well Screened: 5-9' bgl Filter Pack: 2-9' bgl Bentonite: 0-2' bgl Stickup: 0.5'	12
14									14
16									16

RPS**Client:** Western Refining Southwest, Inc.**Site:** Gallup Refinery - Seep West of Tank 102**Job No.:** UEC01809**Geologist:** Tracy Payne**Driller:** N/A**Drilling Rig:** N/A**Drilling Method:** Hand Auger**Sampling Method:** Auger Head**Comments:** N 35°29.360' W 108°25.789'**Total Depth:** 10.75' bgl**Ground Water:** Saturated @ 9' bgl**Elev., TOC (ft. msl):** --**Elev., PAD (ft. msl):** --**Elev., GL (ft. msl):** --**Site Coordinates:**

N

E

LOG OF BORING**Boring No.:** HA3**Start Date:** 7/11/2013 12:45**Finish Date:** 7/11/2013 13:45

Depth (ft.)	Sampling						Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class		
0							Ground Surface	0
2					24.6 98°F	100	Silty Clay (CL) Low plasticity, firm, damp, brown-reddish brown, no odor	2
4								4
6					20.1 98°F	100	Silty Clay (CL) Similar to above, odor at 6' bgl with black discolorations	6
8					400 98°F			8
10				9'	933 98°F	100	Sandy Clay (CL) Low plasticity, soft, moist to saturated at 9' bgl, hydrocarbon odor, no phase-separated hydrocarbon	10
12					800 98°F	100	Sandy Clay/Clayey Sand (SC/CL) Fine grain, compact, saturated, dark brown, hydrocarbon odor, no phase-separated hydrocarbon	12
14							Total Depth = 10.75' BGL	14
16							Set temporary 1" Well Screened: 5.75-10.75' bgl Filter Pack: 2-10.75' bgl Bentonite: 0-2' bgl Stickup: 0.75'	16

RPS

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: N/A
Drilling Rig: N/A
Drilling Method: Hand Auger
Sampling Method: Auger Head
Comments: N 35°29.363' W 108°25.787'

LOG OF BORING

Boring No.: HA4
Start Date: 7/11/2013 14:00
Finish Date: 7/11/2013 15:00

Total Depth: 7' bgl
Ground Water: Saturated @ 4' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N E

Depth (ft.)	Sampling						Recovery (%)	Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class			
0							100	Ground Surface	0
2							100	Silt (ML) Low plasticity, soft, dry, light brown, no odor	2
4					8.2 384°F		100	Sandy Gravelly Clay (CL) Low plasticity, firm, damp, brown, no odor	4
6					90°F		100	Sandy Gravelly Clay (CL) Similar to above, black, hydrocarbon odor, moist	6
8					394 90°F		100	Sandy Gravelly Clay (CL) Similar to above, saturated, oily, hydrocarbon odor, black to dark brown to brown	8
10								Total Depth = 7' BGL	10
12									12
14									14
16									16

Set temporary 1" Well
Screened: 2-7' bgl
Filter Pack: 1-7' bgl
Bentonite: 0-1' bgl
Stickup: 3.25'

RPS

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: N/A
Drilling Rig: N/A
Drilling Method: Hand Auger
Sampling Method: Auger Head
Comments:

LOG OF BORING

Boring No.: HA5
Start Date: 7/11/2013 15:10
Finish Date: 7/11/2013 16:15

Total Depth: 8' bgl
Ground Water: Saturated @ 5.5' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **E**

Depth (ft.)	Sampling						Recovery (%)	Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class			
0								Ground Surface	0
2					8.5 80°F		100	Silt (ML) Low plasticity, very dense, dry to damp, brown, no odor	2
4							100	Sandy Clay/Clayey Sand (CL) Low plasticity, fine grain, compact, brown, no odor	4
6				5.5'	19.4 112°F 80°F		100	Clayey Sand (SC) Similar to above, saturated at 5.5' bgl, becomes black, oily, hydrocarbon odor	6
8								Total Depth = 8' BGL	8
10									10
12									12
14									14
16									16

RPS**Client:** Western Refining Southwest, Inc.**Site:** Gallup Refinery - Seep West of Tank 102**Job No.:** UEC01759**Geologist:** Tracy Payne**Driller:** EDI**Drilling Rig:** CME 75**Drilling Method:** Hollow Stem Auger**Sampling Method:** Split Spoon**Comments:** Approximately 75' from center of road located north of SB01; N 35°29.328' W 108°25.743'**LOG OF BORING****Boring No.:** SB01**Start Date:** 7/12/2013 11:45**Finish Date:** 7/12/2013 15:00**Total Depth:** 20' bgl**Ground Water:** Saturated @ 8' bgl**Elev., TOC (ft. msl):** --**Elev., PAD (ft. msl):** --**Elev., GL (ft. msl):** --**Site Coordinates:****N****E**

Depth (ft.)	Sampling						Recovery (%)	Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class			
0								Ground Surface	0
2					164 80°F		60	Fill (Silt/Sand) Fine grain, loose, dry to damp, brown, no odor	2
4					423 80°F		40	Silty Clay (CL) Low plasticity, firm, damp, brown/reddish brown, no odor	4
6					330 80°F		70	Silty Clay (CL) Similar to above, no odor	6
8					75 80°F		90	Silty Clay (CL) Similar to above, sandy at base from 7.75-8.0' bgl, no odor	8
10					326 80°F		90	Silty Clay (CL) Fine grain sand seams throughout, saturated, phase-separated hydrocarbon, hydrocarbon odor, clear phase-separated hydrocarbon poured out of split spoon	10
12					312 80°F		90	Silty Clay (CL) Similar to above with sand seams, saturated with phase-separated hydrocarbon, hydrocarbon odor, dark brown	12
14					368 80°F		80	Gravelly Sand (SW) Fine to medium to coarse grain, loose, saturated with phase-separated hydrocarbon, black, hydrocarbon odor	14
16					700 80°F		60	Gravelly Sand (SW) Similar to above	16
18							10	Silty Sand/Silty Clay (SM/CL) Low plasticity, firm, moist, brown, faint odor, no phase-separated hydrocarbon	18
								Silty Clay (CL) Poor recovery	

RPS

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01759
Geologist: Tracy Payne
Driller: EDI
Drilling Rig: CME 75
Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Comments: Approximately 75' from center of road located north of SB01; N 35°29.328' W108°25.743'

LOG OF BORING

Boring No.: SB01
Start Date: 7/12/2013 11:45
Finish Date: 7/12/2013 15:00

Total Depth: 20' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N E

Depth (ft.)	Sampling						Recovery (%)	Sample Description	Depth (ft.)
	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class			
20					225 80 °F		80	Clay (CH) High plasticity, very dense, damp, light reddish brown, faint odor Siltstone/Sandstone Fine to very fine grain, compact, stiff, friable, damp, greenish gray, faint odor	20
22								Total Depth = 20' BGL	22
24									24
26									26
28									28
30									30
32									32
34									34
36									36

Set 1" Temporary Well
Screened: 7-17' bgl
Filter Pack: 5-17' bgl
Bentonite: 0-5' bgl