Western Refining
GALLUP

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Via Email and Certified Mail 7011 2970 0003 9281 8268, Return Receipt Requested

July 8, 2015

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: HYDROCARBON SEEP / SOLID WASTE MANAGEMENT UNIT (SWMU) NO. 12
INTERIM MEASURES REPORT
WESTERN REFINING SOUTHWEST, INC., GALLUP REFINERY
EPA ID # NMD000333211
AP-111

Dear Mr. Kieling:

Western Refining Southwest, Inc. - Gallup Refinery ("Western") submits the enclosed Interim Measures Report pursuant to your letter of April 8, 2015. The Interim Measures Report was prepared in accordance with Gallup's RCRA Permit Section IV.H.2. If there are any questions, then please contact me at 505-722-0202. Please note that, in submitting the enclosed, Western makes no admissions and reserves all applicable rights and defenses.

I-40 Exit 39, Jamestown, NM 87347 • 505 722-3833 • www.wnr.com
Mail: 92 Giant Crossing Road, Gallup, NM 87301

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 property 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,

William Carl McClain

Mr. William Carl McClain, Jr.
Refinery Manager
Western Refining Southwest, Inc. - Gallup Refinery

cc Dave Cobrain, NMED HWB without enclosure
Kristen Van Horn, NMED HWB without enclosure
Carl Chavez, OCD
A. Allen, Western El Paso without enclosure

INTERIM MEASURES REPORT
HYDROCARBON SEEP AREA

Gallup Refinery
Western Refining Southwest, Inc.
I-40 Exit 39
Jamestown, New Mexico 87347

JULY 2015

William Carl McClain, Jr.
Refinery Manager
Western Refining Southwest, Inc.
Gallup Refinery

DiSorbo
Environmental Consulting Firm

8501 North Mopac Expy | Suite 300 | Austin, TX 78759
512.693.4190 (P) | 512.279.3118 (F) | www.disorboconsult.com

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List of Acronyms

American Petroleum Institute (API)

benzene, toluene, ethylbenzene, and xylene (BTEX)

diesel range organics (DRO)

Environmental Protection Agency (EPA)

maximum contaminant level (MCL)

monitoring well (MW)

motor oil range organics (MRO)

methyl tert butyl ether (MTBE)

New Mexico Environment Department (NMED)

polyvinyl chloride (PVC)

Separate-phase hydrocarbon (SPH)

Semi-volatile organic compound (SVOC)

Solid Waste Management Unit (SWMU)

total petroleum hydrocarbon (TPH)

toxicity characteristic leaching procedure (TCLP)

volatile organic compound (VOC)

Executive Summary

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery is a crude oil refinery currently owned and operated by Western Refining Southwest, Inc. ("Western") and generally processes crude oil from the Four Corners area to produce gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

On June 26, 2013, Western provided initial notification of the discovery of an apparent seep of hydrocarbons to the land surface to the New Mexico Oil Conservation Division ("NMOCD") with copy to the New Mexico Environment Department Hazardous Waste Bureau ("NMED HWB"). The area identified as the "Hydrocarbon Seep" is located on the western portion of the refinery to the west southwest of crude oil storage tank T-102. This Interim Measures Report presents information on the initial spill response actions and subsequent interim measures that have been conducted to address the seep of hydrocarbons discovered to the west of tank T-102. The interim measures conducted to-date include: (1) source identification, (2) source control measures, and (3) characterization of groundwater impacts.

Source identification included such activities as: 14 soil excavations, distillation analyses of two hydrocarbon samples, laboratory analysis of groundwater samples and one product sample, dye tracer tests on the process sewer system, and completion of soil borings as temporary well completions using a hand auger and hollow-stem drilling rig. A hole was identified in the refinery's wastewater pipeline (Solid Waste Management Unit No. 12 – Wastewater Collection System) near the bundle cleaning pad. A leaking transmix transfer line was also identified in this area. An additional source is likely present further to the south near the main truck loading racks and evaluation of this area is on-going.

Source control has focused on recovery of separate-phase hydrocarbon (SPH) and groundwater from six temporary sumps, which were installed in the soil excavations, and recovery of primarily SPH from individual monitoring wells. From June 26, 2013 through June 30, 2015, 5,364 gallons of SPH and 456,356 gallons of groundwater have been recovered.

Characterization of the impacts to groundwater is an on-going activity to help ensure the interim measures are implemented on a timely basis to minimize any additional impacts to currently unaffected groundwater. There have been four field events conducted in a phased approach from July 2013 to November 2014. This included the installation of 44 permanent monitoring wells (MKTF1 through MKTF-44) and an additional 14 temporary wells, which were plugged after groundwater samples were collected for chemical analysis. A groundwater sampling program was initiated in March 2014 to include quarterly sample collection at all new wells for a period of one year with samples analyzed for volatile organic compounds (VOCs), semi-volatile compounds (SVOCs), total petroleum hydrocarbons (TPH) including gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO), total metals, dissolved metals, and major cations and anions.

Interim measures are on-going to recover SPH and identify any additional potential sources. Evaluations of the feasibility of recovery of SPH and impacted groundwater are underway to support future remedy selection.

Section 1
Introduction

The Gallup Refinery is located approximately 17 miles east of Gallup, New Mexico along the north side of Interstate Highway I-40 in McKinley County. The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Gallup Refinery is located on 810 acres. Figure 1 presents the refinery location and the regional vicinity.

The Gallup Refinery is a crude oil refinery currently owned and operated by Western Refining Southwest, Inc. ("Western"), formerly known as Giant Industries Arizona, Inc. and formerly doing business as Giant Refining Company Ciniza Refinery, an Arizona corporation. The Gallup Refinery generally processes crude oil from the Four Corners area transported to the facility by pipeline or tanker truck. Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, alkylation, isomerization, sulfur recovery, merox treater, and hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

On June 26, 2013, Western provided initial notification of the discovery of an apparent seep of hydrocarbons to the land surface to the NMOCD with copy to the NMED HWB. The area identified as the "Hydrocarbon Seep" is located approximately 280 feet west southwest of crude oil storage tank T-102. The seep location is identified on Figure 2. Subsequent to the discovery of the hydrocarbon seep, Western implemented initial spill response actions. The initial spill response actions and subsequent interim measures are described in Section 2. Section 3 explains the planned future interim measures.

Section 2
Interim Measures

This section presents information on the initial spill response actions and subsequent interim measures that have been conducted to address the seep of hydrocarbons discovered in June 2013 to the west of tank T-102. These activities focused on: (1) source identification, (2) source control measures, and (3) characterization of groundwater impacts.

Source Identification

Initial efforts to identify the source of the hydrocarbons included the following actions:

1. Completion of 14 soil excavations with a backhoe;
2. Distillation analyses of two hydrocarbon samples collected near the seep (Seep 1 and Seep 2);
3. Dye tracer tests on the process sewer system;
4. Completion of five hand-auger borings (HA-1 through HA-5) to the west and northwest of the seep location with temporary well completions;
5. Installation of 22 soil borings with temporary well completions to the southeast of the seep location; and
6. Collection and laboratory analysis of one product sample and six groundwater samples from temporary well completions.

Fourteen soil excavations were completed in the area of the seep to help identify the presence of hydrocarbons in the shallow subsurface as shown on Figure 2. The excavations confirmed the presence of hydrocarbons throughout the immediate area of the seep and to the east and south of the seep. As discussed further below, six of the excavations were found to have sufficient hydrocarbons to warrant completion as temporary recovery sumps. The excavated soils were characterized and disposed off-site at an approved disposal facility.

The results of two distillation analyses of hydrocarbon samples obtained from the seep are plotted on the enclosed graph (Figure 3) and the laboratory reports are also provided in Appendix D. 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 distillation results eliminate Tanks T-101 and T-102 (crude oil storage tanks) as a source of the release.

Two initial dye tests were conducted in the process sewer system in July and August 2013. 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 main truck loading 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 a later fluid gauging event on August 14th, dye was observed in SB-1 and SB-16. The presence of dye in groundwater in the area of the seep indicated a likely release from the sewer system and a possible preferential migration pathway to this area.

Two 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. A subsequent fluid level gauging event was conducted at the temporary monitoring wells on September 26, 2013 (Table 1). The red dye was 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 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.

The enclosed map (Figure 2) 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 are provided in Appendix A. As many of the borings/temporary wells indicate the presence of SPH, groundwater samples were only collected for analysis from HA1, HA2, HA3, HA4, SB-18, and SB-19. The groundwater samples were

analyzed for total petroleum hydrocarbons (TPH) (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.

Based on the results of the dye tests and the location of the observed hydrocarbon impacts, Western investigated the sewer lines to the east. 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. The location of the identified release point in the sewer line is shown on Figure 2.

On 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. A sandpiper was then set up in the bermed area that pumped the hydrocarbon to the process sewer. Operations were then able to isolate the underground pipeline that was leaking. It 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.

Based on the initial source identification efforts, two potential sources were 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. Subsequent chemical analyses of groundwater samples collected from wells further to the west for VOCs by EPA

method 8260 revealed the presence of chlorinated solvents, which would not have been sourced from the transmix line.

As additional wells were installed to characterize the extent of the impacted groundwater, which is discussed below, the impacts were found to extend further to the south. The distribution of the constituents in groundwater confirmed the dye tests, which indicated an additional potential source to the south of the hole in the sewer line that was identified near the Bundle Cleaning Pad. The distribution of impacts to groundwater indicates an additional source at or near the main truck loading racks.

Source Control Measures

Six of the fourteen soil excavations completed near the hydrocarbon seep were initially left open to facilitate recovery of hydrocarbons and groundwater. Subsequently, a six-inch PVC screen was placed into each of these six excavations and they were backfilled with coarse gravel to create temporary sumps to allow for safe, continued recovery of liquids. These locations are designated as S-1 through S-6 and are shown on Figure 2. 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 June 12, 2015 is estimated to be 461,699 gallons (Table 3). The volume of hydrocarbon recovered during this same time period is estimated at 5,343 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 and has declined to less than 1%.

Beginning 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. The individual well recovery volumes are provided in Table 4.

As discussed above, a 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 2). 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 in Appendix B). 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 to facilitate replacement of the

corroded section. Additional excavation of the wastewater pipeline was extended approximately 140 feet south of the Bundle Cleaning Pad. The overall excavation was approximately 180 feet long, 20 feet wide and up to 12 feet deep and is depicted in Figure 4. The corroded section of pipeline was replaced and the impacted soils, which were characterized as non-hazardous, were disposed off-site. Two new permanent monitoring wells (MKTF-20 and MKTF-21) were installed in the backfill materials that were placed along the new section of the wastewater pipeline.

Soil samples were collected from the bottom of the excavation near the bundle cleaning pad and waste characterization samples of all excavated materials were collected and sent to Hall Environmental Laboratories for analysis. A total volume of 278 cubic yards of non-hazardous soil was disposed off-site at the Gandy Marley, Inc. landfill in Chavez County, New Mexico.

The associated laboratory analytical reports are enclosed in Appendix D and are listed below.

- Lab report #1306C03 - waste characterization soil sample of material excavated for sump installation west of Tank 101 and 102
- Lab report #1307524 – waste characterization soil sample of material excavated for sump installation west of Tank 101 and 102
- Lab report #1309D69 - waste characterization soil sample of material excavated for sump installation west of Tank 101 and 102
- Lab report #1311343 - four soil samples that were collected from the intersection of the sidewall and floors on all four sides of the excavation to the west of the bundle cleaning pad
- Lab report #1311380 - waste characterization soil sample from materials excavated near bundle pad
- Lab report #1406C66 – twelve waste characterization soil samples collected from materials excavated near bundle pad

<u>Characterization of Impacted Groundwater</u>

To determine what additional interim measures could be necessary to control the impacts to groundwater, Western installed temporary and permanent monitoring wells to characterize the groundwater impacts. This began with the installation of five hand-augered soil borings (HA1 through HA5) in July 2013, which were completed as temporary wells. Also in July 2013, 22 soil borings (SB01 – SB22) were completed with a drilling rig and temporary well completions were installed in each. An initial round of groundwater samples were collected from four of the five HA

locations (HA5 was destroyed shortly after installation) on July 17, 2013 and soil borings SB-18 and SB-19 on July 25, 2013. Many of the SB temporary wells contained SPH and thus water samples were not collected for analysis. The water samples were analyzed for TPH to obtain an initial characterization of the nature of the hydrocarbons observed throughout the area. The results are included in Table 2 and are discussed above as part of the source identification.

A number of the temporary wells were drilled in locations making them subject to damage due to normal refinery operations in this area. The temporary wells were reviewed to select wells to be plugged vs. recompleted as permanent monitoring wells based on location relative to plant operations, thickness of transmissive sediments (e.g., sand vs. silty clay), measured thickness of SPH, and position of surrounding wells. Ten of the 22 SB temporary wells (SB02, SB04, SB05, SB07, SB09, SB12, SB14, SB15, SB18, and SB21) were plugged and two of the four hand-auger borings (HA2 and HA4) were plugged in November 2013. Prior to plugging these temporary wells, groundwater samples were collected on October 28, 2013 at SB07, SB12, SB14, and SB15 and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and TPH. The remaining 12 temporary wells were recompleted as permanent monitoring wells and two of the hand-auger locations were completed as permanent monitoring wells (MKTF-01/HA1, MKTF-02/HA3, MKTF-03/SB01, MKTF-04/SB03, MKTF-05/SB06, MKTF-06/SB08, MKTF-07/SB10, MKTF-08/SB11, MKTF-09/SB13, MKTF-10/SB16, MKTF-11/SB17, MKTF-12/SB19, MKTF-13/SB20, and MKTF-14/SB22). The permanent wells were designated as “MKTF” wells due to the initial concentration of wells in the area of the Marketing Tank Farm. The well survey information is provided in Appendix C.

Also during the November 2013 field campaign, 13 additional temporary wells (SB23 – SB35) were drilled to further define the lateral extent of the impacted groundwater. Due to their location and concerns over the potential for damage to the wells, four of the wells (MKTF-15/SB31, MKTF16/SB32, MKTF17/SB33, and MKTF18/SB34) were completed as permanent flush-mount wells in November 2013. Temporary wells SB23, SB24, SB25, SB26, SB27, SB28, and SB29 were drilled down-gradient of the previously installed wells. Wells SB30 and SB31 were drilled cross-gradient to the north. Well SB32 was drilled immediately down-gradient of the leaking sewer line. Well SB33 was drilled south of the main body of the plume and immediately down-gradient of the additive tank farm. Well SB34 was drilled down-gradient and to the south of the section of the sewer line that was replaced and also immediately adjacent to the Transmix/Slop Oil Loading Rack. Well SB35 was drilled down-gradient of the additive tank farm and main truck loading racks. Groundwater samples were collected from all 13 new wells in November 2013 and analyzed for

BTEX, TPH, and methyl tert butyl ether (MTBE). The analytical results for groundwater samples collected in October and November 2013 are summarized in Table 2 and the analytical reports are provided in Appendix D. The well locations are shown on Figure 2, with their temporary (SB) well designation numbers.

The next field event occurred in March and April 2014. Previously installed temporary wells SB23, SB25, SB26, SB28, SB29, SB30, and SB35 were completed as permanent monitoring wells MKTF19/SB35, MKTF22/SB23, MKTF23/SB25, MKTF24/SB26, MKTF25/SB28, MKTF26/SB29, and MKTF27/SB30. Temporary wells SB24 and SB27 were plugged after groundwater samples were collected and analyzed for VOCs, SVOCs, TPH, dissolved and total metals, and major cations and anions. Seven new permanent monitoring wells (MKTF-28, MKTF-29, MKTF-30, MKTF-31, MKTF-32, MKTF-33, and MKTF-34) were installed primarily in down-gradient locations. Groundwater samples were collected in April 2014 from all MKTF wells that did not contain SPH (MKTF-01 through MKTF-34, excluding MKTF-01, MKTF-03, MKTF-05, MKTF-06, MKTF-07, MKTF-08, MKTF-12, MKTF-13, MKTF-14, and MKTF-23) and MKTF-28, which was dry. This groundwater sampling event initiated quarterly groundwater sampling for the MKTF wells. The water samples were analyzed for TPH, VOCs, and SVOCs and the results for detected constituents are summarized in Table 2.

Quarterly groundwater samples were collected from the existing MKTF wells in June 2014 (second Quarter event) and September 2014 (third Quarter event). The samples were analyzed for VOCs, SVOCs, TPH, dissolved metals, total metals, and major cations and anions. The results are included in Table 2 and laboratory analytical reports provided in Appendix D.

The last major field event was conducted in November 2014 with the installation of 10 permanent monitoring wells (MKTF-35 through MKTF-44). Two wells (MKTF-35 and MKTF-36) were installed near the main truck loading racks to evaluate this area as a potential source. Three wells (MKTF-37 through MKTF-39) were installed in anticipated up-gradient locations to the east of the main truck loading racks and east of the area where recent repairs were completed on the wastewater pipeline. Five additional wells (MKTF-40 through MKTF-44) were installed west of the main truck loading racks to delineate the down-gradient extent of the plume. During the work near the main truck loading racks, an existing monitoring well was identified at the far western edge of the asphalt apron at the loading rack and it was designated as MKTF-45. Groundwater samples were collected for analysis at all of the 10 new wells except MKTF-40, which did not contain sufficient volume of water to support sample collection. The third quarter 2014 groundwater samples were also collected during the

month of November and the analytical results for detected constituents included in Table 2. The laboratory analytical reports are included in Appendix D.

Quarterly groundwater samples were collected from MKTF wells in March 2015 (first 2015 Quarter event) and June 2015 (second 2015 Quarter event). The samples were analyzed for VOCs, SVOCs, TPH, dissolved metals, total metals, and major cations and anions. The results for detected constituents are included in Table 2 and laboratory analytical reports provided in Appendix D. Not all analytical results were available for the June 2015 sampling event at the time this report was due; however, all available results are included.

Potentiometric surface maps for April 2014 (Figure 5) and March 2015 (Figure 6) indicate the shallow groundwater flow direction mirrors the surface topography. The predominant flow direction is to the west-northwest. There is a southwesterly flow direction away from the area of the main truck loading racks that transitions back to the northwest as you move off the topographic high present near the main truck loading racks and additive tank farm.

Three geologic cross sections were prepared (A-A', B-B' and C-C') and are presented on Figures 7, 8, and 9. The presence of a clayey sand/sandy clay interval is present in many of the borings and appears to provide a potential pathway for contaminant migration. Based 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.

A series of maps (Figures 10 through 15) depicting the extent of dissolved-phase impacts for some of the more prevalent constituents (benzene, 1,1-dichloroethane, dissolved iron, MTBE, naphthalene, and 1,2,4-trimethylbenzene) are included. Figure 16 shows the thickness of SPH as measured in March 2015. The groundwater data collected to-date in the general area of the hydrocarbon seep indicates the presence of petroleum hydrocarbons extending from the leaking sewer line (identified near the bundle cleaning pad) down-gradient to the west to near wastewater tanks T-27 and T-28. A second source of petroleum hydrocarbons and MTBE appears to be located at or near the main truck loading racks. Chlorinated solvents are also present in shallow groundwater and extend from the leaking sewer line near the bundle cleaning pad down-gradient primarily towards evaporation ponds #3, #4, and #5.

Section 3
Future Interim Measures

Western plans to continue recovery at the six temporary sump locations. As the percentage of hydrocarbon has declined to less than one percent of the total fluid volume recovered, future efforts may be focused on recovery of the floating SPH layer and not total fluids recovery from the sumps.

Recovery efforts from individual monitoring wells that consistently contain SPH will also be continued. The recovery efforts at the individual wells are being performed to gather information on the ability of the individual wells to recover SPH in addition to pursuing the overall goal of product recovery. This information may be used to evaluate other potential interim measures.

Western continues to evaluate other potential sources in the area that could be contributing to groundwater impacts. The area near the main truck loading racks has been identified as a potential source and efforts are on-going to identify the actual release point.

Tables

Table 1 **Fluid Level Measurements – Hydrocarbon Seep Area**

Table 2 **Chemical Analyses**

Table 3 **Temporary Sump Recovery Volumes**

Table 4 **Monitoring Well Recovery Volumes**

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-01	HA1	07/11/13	6920.67	0.7970	ND	6.60	0.00	6914.07	
		07/12/13	6920.67	0.7970	ND	6.60	0.00	6914.07	
		07/17/13	6920.67	0.7970	ND	6.80	0.00	6913.87	
		08/14/13	6920.67	0.7970	ND	9.19	0.00	6911.48	
		09/25/13	6920.67	0.7970	5.44	6.36	0.92	6915.04	
		11/20/13	6920.67	0.7970	ND	6.64	0.00	6914.03	
		01/13/14	6920.67	0.7970	7.90	8.34	0.44	6912.68	
		02/12/14	6920.67	0.7970	6.73	6.74	0.01	6913.94	
		03/11/14	6920.67	0.7970	6.10	6.38	0.28	6914.51	
		04/08/14	6920.67	0.7970	7.05	7.25	0.20	6913.58	
		09/15/14	6920.67	0.7970	6.94	6.98	0.04	6913.72	
		03/11/15	6920.67	0.7970	ND	5.85	0.00	6914.82	
		06/09/15	6920.67	0.7970	ND	7.15	0.00	6913.52	
NA	HA2	07/12/13	NS	0.7970	ND	5.51	0.00	NA	
		07/17/13	NS	0.7970	ND	5.82	0.00	NA	
		08/14/13	NS	0.7970	ND	5.31	0.00	NA	
		09/25/13	NS	0.7970	ND	4.80	0.00	NA	Clear - slight odor detected
									Plugged Nov. 2013
MKTF-02	HA3	07/12/13	6917.45	0.7970	ND	6.40	0.00	6911.05	
		07/17/13	6917.45	0.7970	ND	6.68	0.00	6910.77	
		08/14/13	6917.45	0.7970	ND	4.28	0.00	6913.17	
		09/25/13	6917.45	0.7970	ND	4.01	0.00	6913.44	Clear - slight odor detected
		11/20/13	6917.45	0.7970	ND	8.40	0.00	6909.05	
		01/13/14	6917.45	0.7970	ND	7.49	0.00	6909.96	
		02/12/14	6917.45	0.7970	ND	7.48	0.00	6909.97	
		03/11/14	6917.45	0.7970	ND	7.03	0.00	6910.42	
		04/08/14	6917.45	0.7970	ND	7.75	0.00	6909.70	
		09/15/14	6917.45	0.7970	ND	8.41	0.00	6909.04	
		03/11/15	6917.45	0.7970	ND	6.88	0.00	6910.57	
		06/09/15	6917.45	0.7970	ND	7.55	0.00	6909.90	
NA	HA4	07/12/13	NS	0.7970	ND	6.41	0.00	NA	
		07/17/13	NS	0.7970	ND	6.78	0.00	NA	
		08/14/13	NS	0.7970	ND	4.94	0.00	NA	
		09/26/13	NS	0.7970	ND	4.50	0.00	NA	Clear - slight odor detected
									Plugged Nov. 2013
NA	HA5	07/12/13	NS	0.7970	ND	5.50	0.00	NA	
									destroyed after installation

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-03	SB01	07/17/13	6931.31	0.7970	11.50	16.74	5.24	6918.75	
		07/25/13	6931.31	0.7970	10.85	16.55	5.70	6919.30	
		08/14/13	6931.31	0.7970	9.88	9.91	0.03	6921.42	Has reddish tint - trace of dye?
		09/26/13	6931.31	0.7970	9.51	15.19	5.68	6920.65	Red - dye - odor
		11/20/13	6931.31	0.7970	7.11	10.39	3.28	6923.53	
		01/13/14	6931.31	0.7970	8.10	9.40	1.30	6922.95	
		02/13/14	6931.31	0.7970	ND	8.33	0.00	6922.98	
		03/11/14	6931.31	0.7970	8.15	9.07	0.92	6922.97	
		04/08/14	6931.31	0.7970	8.59	9.21	0.62	6922.59	
		09/15/14	6931.31	0.7970	9.06	9.16	0.10	6922.23	
		03/17/15	6931.31	0.7970	8.46	9.26	0.80	6922.69	
		06/04/15	6931.31	0.7970	8.70	9.32	0.62	6922.48	
NA	SB02	07/17/13	227.85	0.7970	10.26	10.58	0.32	NA	
		07/25/13	227.85	0.7970	9.68	9.97	0.29	NA	
		08/14/13	227.85	0.7970	8.74	9.12	0.38	NA	
		09/26/13	227.85	0.7970	8.25	8.45	0.20	NA	red/orange tint - traces of dye
									Plugged Nov. 2013
MKTF-04	SB03	07/17/13	6933.57	0.7970	ND	11.40	0.00	6922.17	
		07/25/13	6933.57	0.7970	ND	12.84	0.00	6920.73	
		08/14/13	6933.57	0.7970	ND	12.01	0.00	6921.56	
		09/26/13	6933.57	0.7970	ND	11.49	0.00	6922.08	Clear - slight odor
		11/20/13	6933.57	0.7970	ND	9.55	0.00	6924.02	
		01/15/14	6933.57	0.7970	ND	10.28	0.00	6923.29	
		02/13/14	6933.57	0.7970	ND	10.68	0.00	6922.89	
		03/11/14	6933.57	0.7970	ND	10.20	0.00	6923.37	
		04/11/14	6933.57	0.7970	ND	10.57	0.00	6923.00	
		09/15/14	6933.57	0.7970	ND	11.09	0.00	6922.48	
		03/16/15	6933.57	0.7970	ND	10.25	0.00	6923.32	
		06/04/15	6933.57	0.7970	ND	11.00	0.00	6922.57	
NA	SB04	07/17/13	232.24	0.7970	ND	13.62	0.00	NA	
		07/25/13	232.24	0.7970	ND	12.98	0.00	NA	
		08/14/13	232.24	0.7970	ND	12.19	0.00	NA	
		09/26/13	232.24	0.7970	11.72	11.79	0.07	NA	Dark w/traces of yw-grn dye
									Plugged Nov. 2013
NA	SB05	07/17/13	234.52	0.7970	14.92	15.95	1.03	NA	
		07/25/13	234.52	0.7970	14.48	15.40	0.92	NA	
		08/14/13	234.52	0.7970	13.66	13.75	0.09	NA	
		09/26/13	234.52	0.7970	13.20	14.25	1.05	NA	Dark w/traces of yw-grn dye
									Plugged Nov. 2013

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-05	SB06	07/22/13	6942.22	0.7970	14.10	14.11	0.01	6928.12	
		07/25/13	6942.22	0.7970	14.00	14.01	0.01	6928.22	
		08/14/13	6942.22	0.7970	ND	13.07	0.00	6929.15	
		09/26/13	6942.22	0.7970	12.19	12.40	0.21	6929.99	Dark w/traces of yw-grn dye
		11/20/13	6942.22	0.7970	14.41	14.43	0.02	6927.81	
		01/15/14	6942.22	0.7970	15.04	15.10	0.06	6927.17	
		02/13/14	6942.22	0.7970	15.33	15.37	0.04	6926.88	
		03/11/14	6942.22	0.7970	ND	15.23	0.00	6926.99	
		04/10/14	6942.22	0.7970	15.50	15.55	0.05	6926.71	
		09/15/14	6942.22	0.7970	15.30	15.66	0.36	6926.85	
		03/16/15	6942.22	0.7970	15.72	16.08	0.36	6926.43	
		06/04/15	6942.22	0.7970	15.77	16.40	0.63	6926.32	
NA	SB07	07/22/13	NS	0.7970	14.84	14.85	0.01	NA	
		07/25/13	NS	0.7970	14.78	14.79	0.01	NA	
		08/14/13	NS	0.7970	ND	13.49	0.00	NA	
		09/26/13	NS	0.7970	ND	12.64	0.00	NA	
									Plugged Nov. 2013
MKTF-06	SB08	07/22/13	6946.81	0.7970	17.88	19.74	1.86	6928.55	
		07/25/13	6946.81	0.7970	17.80	19.68	1.88	6928.63	
		08/14/13	6946.81	0.7970	16.65	18.80	2.15	6929.72	
		09/26/13	6946.81	0.7970	15.96	18.25	2.29	6930.39	Dark w/traces of yw-grn dye
		11/20/13	6946.81	0.7970	17.72	17.76	0.04	6929.08	
		01/13/14	6946.81	0.7970	18.14	18.31	0.17	6928.64	
		02/13/14	6946.81	0.7970	18.34	18.77	0.43	6928.38	
		03/11/14	6946.81	0.7970	18.20	18.95	0.75	6928.46	
		04/08/14	6946.81	0.7970	18.53	19.50	0.97	6928.08	
		09/15/14	6946.81	0.7970	18.15	18.90	0.75	6928.51	
		03/16/15	6946.81	0.7970	18.24	19.94	1.70	6928.22	
		06/04/15	6946.81	0.7970	18.56	19.40	0.84	6928.08	
NA	SB09	07/22/13	240.69	0.7970	16.64	16.65	0.01	NA	
		07/25/13	240.69	0.7970	ND	16.65	0.00	NA	
		08/14/13	240.69	0.7970	ND	14.83	0.00	NA	
		09/26/13	240.69	0.7970	NM	NM	NA	NA	
									Plugged Nov. 2013

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-07	SB10	07/22/13	6947.18	0.7970	ND	8.29	0.00	6938.89	
		07/25/13	6947.18	0.7970	ND	7.74	0.00	6939.44	
		08/14/13	6947.18	0.7970	7.57	9.14	1.57	6939.29	
		09/26/13	6947.18	0.7970	7.35	7.85	0.50	6939.73	Dark w/traces of yw-grn dye
		11/20/13	6947.18	0.7970	12.89	13.09	0.20	6934.25	
		01/13/14	6947.18	0.7970	11.91	13.01	1.10	6935.05	
		02/13/14	6947.18	0.7970	11.88	13.00	1.12	6935.07	
		03/11/14	6947.18	0.7970	11.70	12.85	1.15	6935.25	
		04/08/14	6947.18	0.7970	11.90	13.18	1.28	6935.02	
		09/15/14	6947.18	0.7970	12.00	13.60	1.60	6934.86	
		03/16/15	6947.18	0.7970	13.10	14.23	1.13	6933.85	
		06/04/15	6947.18	0.7970	12.95	14.60	1.65	6933.90	
MKTF-08	SB11	07/22/13	6947.09	0.7970	ND	DRY	0.00	NA	
		07/25/13	6947.09	0.7970	NM	NM	NA	NA	
		08/14/13	6947.09	0.7970	14.06	14.08	0.02	6933.03	
		09/26/13	6947.09	0.7970	13.23	13.45	0.22	6933.82	Dark w/traces of yw-grn dye
		11/20/13	6947.09	0.7970	14.10	14.18	0.08	6932.97	
		01/13/14	6947.09	0.7970	14.20	14.62	0.42	6932.80	
		02/13/14	6947.09	0.7970	14.25	14.69	0.44	6932.75	
		03/11/14	6947.09	0.7970	14.21	14.65	0.44	6932.79	
		04/08/14	6947.09	0.7970	14.44	15.07	0.63	6932.52	
		09/15/14	6947.09	0.7970	14.36	15.05	0.69	6932.59	
		03/16/15	6947.09	0.7970	14.25	14.50	0.25	6932.79	
		06/04/15	6947.09	0.7970	14.35	14.91	0.56	6932.63	
NA	SB12	07/22/13	NS	0.7970	14.13	14.14	0.01	NA	
		07/25/13	NS	0.7970	ND	14.18	0.00	NA	
		08/14/13	NS	0.7970	ND	14.72	0.00	NA	
		09/26/13	NS	0.7970	ND	13.15	0.00	NA	
									Plugged Nov. 2013
MKTF-09	SB13	07/22/13	6946.50	0.7970	ND	15.21	0.00	6931.29	
		07/25/13	6946.50	0.7970	ND	15.03	0.00	6931.47	
		08/14/13	6946.50	0.7970	ND	14.75	0.00	6931.75	
		09/26/13	6946.50	0.7970	ND	13.65	0.00	6932.85	
		11/20/13	6946.50	0.7970	14.72	14.73	0.01	6931.78	
		01/13/14	6946.50	0.7970	ND	14.78	0.00	6931.72	
		02/13/14	6946.50	0.7970	ND	14.82	0.00	6931.68	
		03/11/14	6946.50	0.7970	ND	14.80	0.00	6931.70	
		04/14/14	6946.50	0.7970	ND	15.02	0.00	6931.48	
		09/15/14	6946.50	0.7970	ND	14.89	0.00	6931.61	
		03/16/15	6946.50	0.7970	ND	14.48	0.00	6932.02	
		06/04/15	6946.50	0.7970	ND	14.68	0.00	6931.82	

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
NA	SB14	07/25/13	240.79	0.7970	ND	16.09	0.00	NA	
		08/14/13	240.79	0.7970	ND	15.70	0.00	NA	
		09/26/13	240.79	0.7970	ND	15.25	0.00	NA	
									Plugged Nov. 2013
NA	SB15	07/25/13	239.04	0.7970	ND	19.46	0.00	NA	
		08/14/13	239.04	0.7970	ND	18.54	0.00	NA	
		09/26/13	239.04	0.7970	ND	17.83	0.00	NA	
									Plugged Nov. 2013
MKTF-10	SB16	07/25/13	6937.16	0.7970	11.04	14.20	3.16	6925.48	
		08/14/13	6937.16	0.7970	10.76	11.36	0.60	6926.28	Has reddish tint - trace of dye?
		09/26/13	6937.16	0.7970	10.34	10.69	0.35	6926.75	orange w/red tint - traces of dye
		11/20/13	6937.16	0.7970	ND	8.52	0.00	6928.64	
		01/13/14	6937.16	0.7970	ND	8.75	0.00	6928.41	
		02/13/14	6937.16	0.7970	ND	8.89	0.00	6928.27	
		03/11/14	6937.16	0.7970	ND	8.88	0.00	6928.28	
		04/11/14	6937.16	0.7970	ND	8.90	0.00	6928.26	
		09/15/14	6937.16	0.7970	ND	8.99	0.00	6928.17	
		03/16/15	6937.16	0.7970	ND	8.96	0.00	6928.20	
		06/04/15	6937.16	0.7970	ND	8.82	0.00	6928.34	
MKTF-11	SB17	07/25/13	6931.34	0.7970	12.00	12.13	0.13	6919.31	
		08/14/13	6931.34	0.7970	11.09	11.25	0.16	6920.22	
		09/26/13	6931.34	0.7970	9.79	13.02	3.23	6920.89	orange w/red tint - traces of dye
		11/20/13	6931.34	0.7970	ND	7.95	0.00	6923.39	
		01/15/14	6931.34	0.7970	ND	8.49	0.00	6922.85	
		02/13/14	6931.34	0.7970	ND	8.64	0.00	6922.70	
		03/11/14	6931.34	0.7970	ND	8.50	0.00	6922.84	
		04/11/14	6931.34	0.7970	ND	8.85	0.00	6922.49	
		09/15/14	6931.34	0.7970	ND	9.35	0.00	6921.99	
		03/16/15	6931.34	0.7970	ND	8.80	0.00	6922.54	
		06/04/15	6931.34	0.7970	ND	9.00	0.00	6922.34	
NA	SB18	07/25/13	238.53	0.7970	ND	18.58	0.00	NA	
		08/14/13	238.53	0.7970	ND	17.54	0.00	NA	
		09/26/13	238.53	0.7970	ND	14.60	0.00	NA	
									Plugged Nov. 2013

Table 1
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Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-12	SB19	07/25/13	6942.11	0.7970	ND	19.45	0.00	6922.66	
		08/14/13	6942.11	0.7970	18.30	18.80	0.50	6923.71	
		09/26/13	6942.11	0.7970	17.30	21.30	4.00	6924.00	Dark w/traces of yw-grn dye
		11/20/13	6942.11	0.7970	ND	18.51	0.00	6923.60	
		01/13/14	6942.11	0.7970	19.26	19.53	0.27	6922.80	
		02/12/14	6942.11	0.7970	19.45	19.87	0.42	6922.57	
		03/11/14	6942.11	0.7970	19.15	19.43	0.28	6922.90	
		04/08/14	6942.11	0.7970	19.60	20.08	0.48	6922.41	
		09/15/14	6942.11	0.7970	19.81	21.00	1.19	6922.06	
		11/17/14	6942.11	0.7970	20.20	21.38	1.18	6921.67	
		03/12/15	6942.11	0.7970	19.13	20.94	1.81	6922.61	
		06/09/15	6942.11	0.7970	19.47	21.65	2.18	6922.20	
MKTF-13	SB20	07/25/13	6935.18	0.7970	13.62	16.24	2.62	6921.03	
		08/14/13	6935.18	0.7970	12.88	16.30	3.42	6921.61	
		09/26/13	6935.18	0.7970	12.37	15.40	3.03	6922.19	Dark w/traces of yw-grn dye
		11/20/13	6935.18	0.7970	12.02	12.10	0.08	6923.14	
		01/13/14	6935.18	0.7970	12.80	13.10	0.30	6922.32	
		02/12/14	6935.18	0.7970	12.98	13.32	0.34	6922.13	
		03/11/14	6935.18	0.7970	12.67	13.00	0.33	6922.44	
		04/08/14	6935.18	0.7970	14.46	15.03	0.57	6920.60	
		09/15/14	6935.18	0.7970	14.61	15.75	1.14	6920.34	
		11/17/14	6935.18	0.7970	14.93	16.33	1.40	6919.97	
		03/12/15	6935.18	0.7970	13.75	15.82	2.07	6921.01	
		06/09/15	6935.18	0.7970	14.22	15.87	1.65	6920.63	
NA	SB21	07/25/13	NS	0.7970	9.93	12.15	2.22	NA	
		08/14/13	NS	0.7970	9.20	9.98	0.78	NA	
		09/26/13	NS	0.7970	8.49	9.57	1.08	NA	Dark w/traces of yw-grn dye
									Plugged Nov. 2013
MKTF-14	SB22	07/25/13	6928.02	0.7970	7.89	10.99	3.10	6919.50	
		08/14/13	6928.02	0.7970	6.77	7.91	1.14	6921.02	
		09/26/13	6928.02	0.7970	6.35	9.45	3.10	6921.04	red/orange tint - traces of dye
		11/20/13	6928.02	0.7970	6.88	9.05	2.17	6920.70	
		01/13/14	6928.02	0.7970	7.38	8.99	1.61	6920.31	
		02/12/14	6928.02	0.7970	7.60	8.77	1.17	6920.18	
		03/11/14	6928.02	0.7970	7.27	8.42	1.15	6920.52	
		04/08/14	6928.02	0.7970	7.72	8.59	0.87	6920.12	
		09/15/14	6928.02	0.7970	8.30	8.75	0.45	6919.63	
		11/17/14	6928.02	0.7970	8.57	8.94	0.37	6919.37	
		03/12/15	6928.02	0.7970	7.60	8.15	0.55	6920.31	
		06/09/15	6928.02	0.7970	8.00	8.37	0.37	6919.94	

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Western Refining Southwest, Inc. - Gallup Refinery

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MKTF-22	SB23	11/20/13	6942.31	0.7970	ND	25.60	0.00	6916.71	
		04/10/14	6942.31	0.7970	ND	26.10	0.00	6916.21	
		09/23/14	6942.31	0.7970	ND	DRY	0.00	DRY	
		11/17/14	6942.31	0.7970	ND	26.67	0.00	6915.64	
		03/12/15	6942.31	0.7970	ND	26.07	0.00	6916.24	
		06/09/15	6942.31	0.7970	ND	26.18	0.00	6916.13	
NA	SB24	11/20/13	NS	NA	ND	15.23	0.00	NA	
		04/03/14	NS	NA	ND	15.75	0.00	NA	
									Plugged April 2014
MKTF-23	SB25	11/20/13	6929.98	0.7970	14.32	14.33	0.01	6915.66	
		04/10/14	6929.98	0.7970	14.71	14.95	0.24	6915.22	
		09/23/14	6929.98	0.7970	ND	15.39	0.00	6914.59	
		11/17/14	6929.98	0.7970	ND	15.27	0.00	6914.71	
		03/12/15	6929.98	0.7970	ND	14.79	0.00	6915.19	
		06/09/15	6929.98	0.7970	ND	13.82	0.00	6916.16	
MKTF-24	SB26	11/20/13	6928.72	0.7970	ND	19.97	0.00	6908.75	
		04/08/14	6928.72	0.7970	ND	20.25	0.00	6908.47	
		09/23/14	6928.72	0.7970	ND	22.57	0.00	6906.15	
		03/11/15	6928.72	0.7970	ND	21.54	0.00	6907.18	
		06/10/15	6928.72	0.7970	ND	21.65	0.00	6907.07	
NA	SB27	11/20/13	NS	NA	ND	8.13	0.00	NA	
		04/03/14	NS	NA	ND	8.36	0.00	NA	
									Plugged April 2014
MKTF-25	SB28	11/20/13	6916.19	0.7970	ND	10.33	0.00	6905.86	
		04/08/14	6916.19	0.7970	ND	10.80	0.00	6905.39	
		09/23/14	6916.19	0.7970	ND	12.13	0.00	6904.06	
		03/11/15	6916.19	0.7970	ND	10.85	0.00	6905.34	
		06/10/15	6916.19	0.7970	ND	11.04	0.00	6905.15	
MKTF-26	SB29	11/20/13	6915.31	0.7970	ND	8.02	0.00	6907.29	
		04/08/14	6915.31	0.7970	ND	8.18	0.00	6907.13	
		09/23/14	6915.31	0.7970	ND	9.30	0.00	6906.01	
		03/11/15	6915.31	0.7970	ND	8.00	0.00	6907.31	
		06/10/15	6915.31	0.7970	ND	8.57	0.00	6906.74	
MKTF-27	SB30	11/20/13	6917.90	0.7970	ND	8.26	0.00	6909.64	
		04/08/14	6917.90	0.7970	ND	7.42	0.00	6910.48	
		09/23/14	6917.90	0.7970	ND	8.60	0.00	6909.30	
		03/11/15	6917.90	0.7970	ND	7.10	0.00	6910.80	
		06/09/15	6917.90	0.7970	ND	7.44	0.00	6910.46	

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-15	SB31	11/20/13	6943.48	0.7970	ND	17.03	0.00	6926.45	
		01/13/14	6943.48	0.7970	ND	13.88	0.00	6929.60	
		02/13/14	6943.48	0.7970	ND	13.88	0.00	6929.60	
		03/11/14	6943.48	0.7970	ND	13.86	0.00	6929.62	
		04/10/14	6943.48	0.7970	ND	13.90	0.00	6929.58	
		09/15/14	6943.48	0.7970	ND	13.71	0.00	6929.77	
		03/16/15	6943.48	0.7970	13.17	13.92	0.75	6930.16	
		06/04/15	6943.48	0.7970	13.20	13.78	0.58	6930.16	
MKTF-16	SB32	11/20/13	6950.58	0.7970	ND	11.25	0.00	6939.33	
		01/13/14	6950.58	0.7970	ND	9.45	0.00	6941.13	
		02/13/14	6950.58	0.7970	ND	9.63	0.00	6940.95	
		03/11/14	6950.58	0.7970	ND	9.66	0.00	6940.92	
		04/10/14	6950.58	0.7970	ND	9.72	0.00	6940.86	
		09/15/14	6950.58	0.7970	ND	10.60	0.00	6939.98	
		11/18/14	6950.58	0.7970	ND	11.66	0.00	6938.92	
		03/16/15	6950.58	0.7970	ND	10.93	0.00	6939.65	
		06/08/15	6950.58	0.7970	ND	12.80	0.00	6937.78	
MKTF-17	SB33	11/20/13	6945.76	0.7970	ND	11.18	0.00	6934.58	
		01/13/14	6945.76	0.7970	ND	8.81	0.00	6936.95	
		02/13/14	6945.76	0.7970	ND	9.81	0.00	6935.95	
		03/11/14	6945.76	0.7970	ND	10.00	0.00	6935.76	
		04/08/14	6945.76	0.7970	ND	10.10	0.00	6935.66	
		09/15/14	6945.76	0.7970	ND	11.27	0.00	6934.49	
		11/18/14	6945.76	0.7970	ND	12.75	0.00	6933.01	
		03/12/15	6945.76	0.7970	ND	12.81	0.00	6932.95	
		06/08/15	6945.76	0.7970	ND	13.40	0.00	6932.36	
MKTF-18	SB34	11/20/13	6950.65	0.7970	ND	7.25	0.00	6943.40	
		01/13/14	6950.65	0.7970	ND	8.33	0.00	6942.32	
		02/13/14	6950.65	0.7970	ND	8.33	0.00	6942.32	
		03/11/14	6950.65	0.7970	ND	8.09	0.00	6942.56	
		04/14/14	6950.65	0.7970	ND	8.26	0.00	6942.39	
		09/15/14	6950.65	0.7970	ND	8.81	0.00	6941.84	
		11/18/14	6950.65	0.7970	ND	9.46	0.00	6941.19	
		03/17/15	6950.65	0.7970	ND	8.92	0.00	6941.73	
		06/08/15	6950.65	0.7970	ND	8.86	0.00	6941.79	
MKTF-19	SB35	11/20/13	6944.67	0.7970	ND	14.55	0.00	6930.12	
		04/09/14	6944.67	0.7970	ND	12.00	0.00	6932.67	
		09/24/14	6944.67	0.7970	ND	12.47	0.00	6932.20	
		11/18/14	6944.67	0.7970	ND	13.76	0.00	6930.91	
		03/12/15	6944.67	0.7970	ND	12.95	0.00	6931.72	
		06/08/15	6944.67	0.7970	ND	12.76	0.00	6931.91	

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-20	NA	04/10/14	6951.78	0.7970	ND	7.86	0.00	6943.92	
		09/23/14	6951.78	0.7970	ND	8.38	0.00	6943.40	
		11/18/14	6951.78	0.7970	ND	8.40	0.00	6943.38	
		03/16/15	6951.78	0.7970	ND	7.26	0.00	6944.52	
		06/08/15	6951.78	0.7970	ND	7.89	0.00	6943.89	
MKTF-21	NA	04/10/14	6952.57	0.7970	ND	7.60	0.00	6944.97	
		09/23/14	6952.57	0.7970	ND	8.39	0.00	6944.18	
		11/18/14	6952.57	0.7970	ND	8.00	0.00	6944.57	
		03/16/15	6952.57	0.7970	ND	7.62	0.00	6944.95	
		06/10/15	6952.57	0.7970	ND	7.96	0.00	6944.61	
MKTF-28	NA	04/09/14	6921.52	0.7970	ND	DRY	0.00	NA	
		09/23/14	6921.52	0.7970	ND	6.20	0.00	6915.32	
		03/11/15	6921.52	0.7970	ND	6.64	0.00	6914.88	
		06/09/15	6921.52	0.7970	ND	5.40	0.00	6916.12	
MKTF-29	NA	04/09/14	6901.62	0.7970	ND	1.91	0.00	6899.71	
		09/23/14	6901.62	0.7970	ND	4.40	0.00	6897.22	
		03/11/15	6901.62	0.7970	ND	2.04	0.00	6899.58	
		06/10/15	6901.62	0.7970	ND	2.69	0.00	6898.93	
MKTF-30	NA	04/09/14	6900.80	0.7970	ND	14.37	0.00	6886.43	
		09/23/14	6900.80	0.7970	ND	15.89	0.00	6884.91	
		11/17/14	6900.80	0.7970	ND	15.87	0.00	6884.93	
		03/11/15	6900.80	0.7970	ND	14.74	0.00	6886.06	
		06/10/15	6900.80	0.7970	ND	14.54	0.00	6886.26	
MKTF-31	NA	04/08/14	6906.87	0.7970	ND	7.90	0.00	6898.97	
		09/23/14	6906.87	0.7970	ND	8.35	0.00	6898.52	
		11/17/14	6906.87	0.7970	ND	8.40	0.00	6898.47	
		03/11/15	6906.87	0.7970	ND	7.98	0.00	6898.89	
		06/10/15	6906.87	0.7970	ND	7.75	0.00	6899.12	
MKTF-32	NA	04/09/14	6911.11	0.7970	ND	14.78	0.00	6896.33	
		09/23/14	6911.11	0.7970	ND	16.68	0.00	6894.43	
		11/17/14	6911.11	0.7970	ND	16.48	0.00	6894.63	
		03/12/15	6911.11	0.7970	ND	15.49	0.00	6895.62	
		06/09/15	6911.11	0.7970	ND	15.49	0.00	6895.62	
MKTF-33	NA	04/09/14	6939.75	0.7970	ND	23.38	0.00	6916.37	
		09/23/14	6939.75	0.7970	ND	23.69	0.00	6916.06	
		11/17/14	6939.75	0.7970	ND	23.79	0.00	6915.96	
		03/12/14	6939.75	0.7970	ND	23.32	0.00	6916.43	
		06/09/15	6939.75	0.7970	ND	23.30	0.00	6916.45	

Table 1
Fluid Level Measurements - Hydrocarbon Seep Area
Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
MKTF-34	NA	04/09/14	6945.35	0.7970	ND	19.98	0.00	6925.37	
		09/23/14	6945.35	0.7970	ND	19.08	0.00	6926.27	
		11/17/14	6945.35	0.7970	ND	19.08	0.00	6926.27	
		03/12/15	6945.35	0.7970	ND	18.77	0.00	6926.58	
		06/08/15	6945.35	0.7970	ND	18.90	0.00	6926.45	
MKTF-35	NA	11/21/14	6951.65	0.7970	ND	9.76	0.00	6941.89	
		03/17/15	6951.65	0.7970	ND	8.93	0.00	6942.72	
		06/04/15	6951.65	0.7970	ND	8.93	0.00	6942.72	
MKTF-36	NA	11/21/14	6950.12	0.7970	ND	8.05	0.00	6942.07	
		03/17/15	6950.12	0.7970	ND	7.71	0.00	6942.41	
		06/04/15	6950.12	0.7970	ND	7.53	0.00	6942.59	
MKTF-37	NA	11/21/14	6958.87	0.7970	ND	16.50	0.00	6942.37	
		03/17/15	6958.87	0.7970	ND	9.21	0.00	6949.66	
		06/04/15	6958.87	0.7970	ND	9.48	0.00	6949.39	
MKTF-38	NA	11/21/14	6954.89	0.7970	ND	12.90	0.00	6941.99	
		03/16/15	6954.89	0.7970	ND	9.00	0.00	6945.89	
		06/10/15	6954.89	0.7970	ND	9.34	0.00	6945.55	
MKTF-39	NA	11/17/14	6953.75	0.7970	ND	10.25	0.00	6943.50	
		03/16/15	6953.75	0.7970	ND	8.88	0.00	6944.87	
		06/10/19	6953.75	0.7970	ND	9.31	0.00	6944.44	
MKTF-40	NA	11/18/14	6894.33	0.7970	ND	19.94	0.00	6874.39	
		03/11/15	6894.33	0.7970	ND	14.60	0.00	6879.73	
		06/10/15	6894.33	0.7970	ND	14.20	0.00	6880.13	
MKTF-41	NA	11/17/14	6893.64	0.7970	ND	26.90	0.00	6866.74	
		03/12/15	6893.64	0.7970	ND	20.07	0.00	6873.57	
		06/09/15	6893.64	0.7970	ND	19.77	0.00	6873.87	
MKTF-42	NA	11/17/14	6892.95	0.7970	ND	18.79	0.00	6874.16	
		03/11/15	6892.95	0.7970	ND	17.94	0.00	6875.01	
		06/09/15	6892.95	0.7970	ND	17.60	0.00	6875.35	
MKTF-43	NA	11/17/14	6876.90	0.7970	ND	6.95	0.00	6869.95	
		03/11/15	6876.90	0.7970	ND	5.20	0.00	6871.70	
		06/10/15	6876.90	0.7970	ND	3.63	0.00	6873.27	
MKTF-44	NA	11/17/14	6869.95	0.7970	ND	48.80	0.00	6821.15	
		03/12/15	6869.95	0.7970	ND	38.44	0.00	6831.51	
		06/10/15	6869.95	0.7970	ND	29.55	0.00	6840.40	
MKTF-45	NA	03/17/15	6949.59	0.7970	13.14	14.94	1.80	6936.08	
		06/08/15	6949.59	0.7970	13.20	16.75	3.55	6935.67	
OW-10	NA	11/21/14	6874.91	0.7970	ND	3.00	0.00	6871.91	
		03/09/15	6874.91	0.7970	ND	0.96	0.00	6873.95	

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Western Refining Southwest, Inc. - Gallup Refinery

Well ID	Soil Boring ID	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
NA	S-1	08/14/13	NS	0.7970	3.76	3.89	0.13		
		09/25/13	NS	0.7970	2.97	4.00	1.03		
		08/14/14	NS	0.7970	4.97	4.97	<0.01		
NA	S-2	08/14/13	NS	0.7970	5.90	6.01	0.11		
		09/25/13	NS	0.7970	5.28	5.66	0.38		
		08/14/14	NS	0.7970	4.22	5.00	0.78		
NA	S-3	08/14/13	NS	0.7970	5.02	5.19	0.17		
		09/25/13	NS	0.7970	4.44	4.69	0.25		
		08/14/14	NS	0.7970	5.29	5.50	0.21		
NA	S-4	08/14/13	NS	0.7970	3.70	ND	NA		
		09/25/13	NS	0.7970	3.04	3.11	0.07		
		08/14/14	NS	0.7970	4.25	5.36	1.11		
NA	S-5	08/14/13	NS	0.7970	3.71	3.96	0.25		
		09/25/13	NS	0.7970	3.02	3.48	0.46		
		08/14/14	NS	0.7970	6.09	6.50	0.41		
NA	S-6	08/14/13	NS	0.7970	3.96	4.37	0.41		
		09/25/13	NS	0.7970	3.30	3.85	0.55		
		08/14/14	NS	0.7970	6.32	6.49	0.17		

NS - not surveryed
ND - no product detected
NA - not available or not applicalbe
Specific gravity calculated using an API Gravity of 45.7 = 0.797.

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	**0.75**	0.75	**0.62**	NE
40 CFR 141.62 MCL (April 2014)			**0.005**	1.0	**0.7**	10	NE
NMED Tap Water (December 2014)			0.00454	1.1	0.0149	0.193	**0.143**
EPA RSL for Tap Water (November 2014)			0.00045	1.1	0.0015	0.19	0.014
WELL ID	**DATE SAMPLED**	**METHOD**					
MKTF-1 / HA1	03/11/15	8260B	**9.3**	**2**	**0.74**	**1.9**	**0.37**
	09/15/14		product present				
	06/06/14	8260B	**8.7**	**7.1**	**0.92**	**4.3**	**0.42**
MKTF-2 / HA3	03/11/15	8260B	**0.2**	<0.002	0.0041	0.0076	0.044
	11/14/14	8260B	**0.2**	0.0022	0.003	0.002	0.059
	09/18/14	8260B	**2.1**	0.044	0.340	<0.0075	0.1
	06/06/14	8260B	**0.23**	0.0036	0.022	0.034	0.042
	04/08/14	8260B	**0.11**	<0.002	0.0035	0.008	0.036
	10/28/13	8021B	**0.69**	<0.020	0.055	0.160	<0.050
MKTF-4 / SB03	06/04/15	8260B	**0.31**	0.013	0.450	0.560	**1.3**
	03/16/15	8260B	**0.22**	<0.01	0.260	0.340	**1.2**
	11/13/14	8260B	**0.18**	<0.01	0.28	0.26	**1.4**
	09/15/14	8260B	**0.15**	<0.005	0.14	0.14	**1.4**
	06/04/14	8260B	**0.67**	0.019	0.57	0.68	**1.8**
	04/11/14	8260B	**1**	0.025	**0.8**	**1.0**	**2.4**
SB07	10/28/13	8021B	**3.2**	<0.1	**1.2**	**1.6**	**4.5**
SB12	10/28/13	8021B	**2.6**	0.13	**0.82**	**3.0**	**3.5**
MKTF-9 / SB13	06/04/15	8260B	**0.89**	0.025	0.015	0.039	**0.43**
	03/16/15	8260B	**0.49**	0.013	0.080	0.018	**0.500**
	11/14/14	8260B	**0.81**	0.033	0.15	0.11	**0.77**
	09/18/14	8260B	**0.75**	0.027	0.096	0.043	**0.76**
	06/05/14	8260B	**1.3**	0.052	0.2	0.098	**1.2**
	04/14/14	8260B	**1.1**	0.038	0.14	0.075	**1.2**
SB14	10/28/13	8021B	**12**	**14**	**0.96**	**4.7**	**0.46**
SB15	10/28/13	8021B	**7.3**	**7.6**	**0.92**	**4.6**	**0.89**
MKTF-10 / SB16	06/04/15	8260B	**10**	**20**	**1.5**	**6.5**	<0.05
	03/16/15	8260B	**11**	**21**	**1.6**	**6.8**	<0.05
	11/14/14	8260B	**11**	**20**	**1.7**	**7.6**	<0.02
	09/18/14	8260B	**11**	**15**	**0.93**	**4.0**	<0.05
	06/06/14	8260B	**12**	**14**	**0.74**	**3.4**	0.019
	04/11/14	8260B	**14**	**19**	**1.5**	**6.9**	<0.05
MKTF-11 / SB17	06/04/15	8260B	**12**	**13**	**1.2**	**4.9**	0.041
	03/16/15	8260B	**10**	**11**	**0.93**	**3.7**	0.048
	11/13/14	8260B	**9.5**	**8.2**	**0.77**	**2.3**	0.08
	09/15/14	8260B	**9.5**	**7.1**	**0.72**	**2.0**	0.083
	06/05/14	8260B	**12**	**7.8**	**0.75**	0.018	0.096
	04/11/14	8260B	**15**	**7.6**	**0.93**	**2.2**	**0.15**
MKTF-15 / SB31	03/16/15	8260B	product present				
	09/17/14	8260B	**11**	**7.0**	**1.4**	**4.3**	**0.38**
	06/05/14	8260B	**12**	**8.8**	**1.3**	**3.7**	**0.27**
	04/10/14	8260B	**16**	**2.4**	**1.2**	**6.1**	**0.27**
	11/01/13	8021B	**12**	**12**	**1.5**	**4.8**	NA

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	**0.75**	0.75	**0.62**	NE
40 CFR 141.62 MCL (April 2014)			**0.005**	1.0	**0.7**	10	NE
NMED Tap Water (December 2014)			0.00454	1.1	0.0149	0.193	**0.143**
EPA RSL for Tap Water (November 2014)			0.00045	1.1	0.0015	0.19	0.014
WELL ID	**DATE SAMPLED**	**METHOD**					
MKTF-16 / SB32	03/16/15	8260B	**19**	0.45	**1.4**	**5.4**	**1.6**
	11/18/14	8260B	**20**	**1.2**	**1.3**	**5.8**	**1.4**
	09/17/14	8260B	**17**	**1.4**	**1.2**	**5.3**	**2.1**
	06/05/14	8260B	**18**	**3.7**	**1.7**	**8.1**	**2.0**
	04/10/14	8260B	**11**	**7.5**	**1.1**	**3.6**	**0.27**
	11/19/13	8021B	**9.9**	**8.2**	**1.9**	**9.8**	NA
MKTF-17 / SB33	03/12/15	8260B	**0.0028**	<0.001	0.0059	<0.0015	**0.59**
	11/18/14	8260B	**0.14**	<0.001	0.078	<0.0015	**0.57**
	09/18/14	8260B	**0.55**	<0.01	0.24	<0.015	**0.69**
	06/06/14	8260B	**2.6**	<0.01	0.48	0.068	**1.1**
	04/09/14	8260B	**3.5**	<0.01	0.58	0.27	**1.3**
	11/19/13	8021B	**1.8**	1.6	0.71	2.7	NA
MKTF-18 / SB34	03/17/15	8260B	**0.058**	<0.005	0.017	0.029	0.091
	11/18/14	8260B	**0.096**	0.0076	0.09	0.047	0.1
	09/18/14	8260B	**0.12**	0.013	0.069	0.042	0.12
	06/06/14	8260B	**0.29**	0.014	0.036	0.055	0.14
	04/14/14	8260B	**0.29**	0.015	0.058	0.044	**0.15**
	11/19/13	8021B	**0.33**	0.37	0.13	0.47	NA
MKTF-19 / SB35	03/12/15	8260B	**1.4**	<0.01	0.43	0.15	**9.7**
	11/18/14	8260B	**2.3**	<0.05	**0.74**	0.36	**9.7**
	09/24/14	8260B	**1.8**	<0.05	**0.73**	**0.76**	**11**
	04/09/14	8260B	**1.4**	<0.05	0.68	0.61	**9.7**
	11/05/13	8021B	**0.64**	0.14	0.47	**1.1**	NA
MKTF-20	03/16/15	8260B	**7**	**2.3**	0.089	**9.6**	<0.05
	11/18/14	8260B	**4.4**	**1.3**	0.48	**10**	0.083
	04/11/14	8260B	**25**	**17**	**2.8**	**14**	**0.38**
MKTF-21	03/16/15	8260B	**3.7**	0.26	0.013	0.27	**0.63**
	04/11/14	8260B	**7.2**	**13**	**2.1**	**11**	**0.58**
MKTF-22 / SB23	03/12/15	8260B	**2.6**	<0.02	0.25	<0.03	**5.1**
	11/17/14	8260B	**1.6**	<0.01	0.09	<0.015	**3.9**
	09/23/14		Dry				
	04/10/14	8260B	**2.3**	0.021	0.28	0.032	**3.7**
	11/19/13	8021B	**1.3**	0.0075	0.072	0.016	NA
SB24	11/05/13	8021B	**0.49**	0.36	0.19	**0.9**	NA
MKTF-23 / SB25	03/12/15	8260B	**3.3**	**4.8**	0.6	**8.1**	**1.1**
	11/17/14	8260B	**3.6**	**3**	0.47	**4.5**	**0.57**
	09/23/14	8260B	**2.7**	**1.4**	0.34	**1.6**	**0.48**
	04/10/14		product present				
	11/05/13	8021B	**0.92**	**1**	0.23	**0.66**	NA
MKTF-24 / SB26	03/11/15	8260B	**2.6**	0.012	0.031	<0.0075	**0.17**
	11/14/14	8260B	**1.6**	0.0095	0.049	0.0029	0.063
	09/24/14	8260B	**1.6**	0.0087	0.058	<0.003	0.017
	04/08/14	8260B	**0.45**	0.0067	0.065	0.0023	**0.18**
	11/01/13	8021B	**1.2**	<0.020	0.23	<0.040	NA

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	**0.75**	0.75	**0.62**	NE
40 CFR 141.62 MCL (April 2014)			**0.005**	1.0	**0.7**	10	NE
NMED Tap Water (December 2014)			0.00454	1.1	0.0149	0.193	**0.143**
EPA RSL for Tap Water (November 2014)			0.00045	1.1	0.0015	0.19	0.014
WELL ID	**DATE SAMPLED**	**METHOD**					
SB27	11/01/13	8021B	**1.8**	0.200	1.5	**6.4**	NA
MKTF-25 / SB28	03/11/15	8260B	**0.97**	0.012	0.17	<0.0075	**0.27**
	11/14/14	8260B	**0.58**	<0.005	0.023	<0.0075	**0.18**
	09/23/14	8260B	**0.53**	<0.01	0.012	<0.015	**0.23**
	04/08/14	8260B	**1**	0.0092	0.13	0.013	**0.27**
	11/01/13	8021B	**1.4**	<0.020	0.16	<0.040	NA
MKTF-26 / SB29	03/11/15	8260B	**0.8**	0.0078	0.0071	<0.0075	0.099
	11/14/14	8260B	**0.97**	0.011	<0.005	<0.0075	0.094
	09/24/14	8260B	**1.6**	0.019	0.012	0.0016	0.084
	04/08/14	8260B	**0.017**	<0.001	<0.001	<0.0015	0.049
	11/01/13	8021B	**0.57**	0.008	0.15	0.002	NA
MKTF-27 / SB30	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	0.0089
	11/14/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.019
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.011
	04/08/14	8260B	<0.002	<0.002	<0.002	<0.003	0.038
	11/19/13	8021B	<0.001	<0.001	<0.001	<0.002	NA
MKTF-28	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/14/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.013
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.016
	04/09/14		DRY				
MKTF-29	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	0.017
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.013
	04/08/14	8260B	<0.001	<0.001	<0.001	<0.015	0.012
MKTF-30	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	0.0019
	11/17/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.0037
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.0059
	04/09/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.021
MKTF-31	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	0.054
	11/17/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.058
	09/23/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.055
	04/08/14	8260B	<0.001	<0.001	<0.001	<0.0015	0.055
MKTF-32	03/12/15	8260B	<0.001	<0.001	<0.001	<0.0015	**0.54**
	11/17/14	8260B	<0.001	<0.001	<0.001	<0.0015	**0.4**
	09/23/14	8260B	<0.005	<0.005	<0.005	<0.0075	**0.32**
	04/09/14	8260B	<0.001	<0.001	<0.001	<0.0015	**0.15**
MKTF-33	03/12/15	8260B	<0.001	<0.001	<0.001	<0.0015	**0.48**
	11/17/14	8260B	<0.001	<0.001	<0.001	<0.0015	**0.41**
	09/23/14	8260B	<0.005	<0.005	<0.005	<0.0075	**0.45**
	04/10/14	8260B	**0.028**	<0.001	<0.001	<0.0015	**0.36**
MKTF-34	03/12/15	8260B	<0.001	<0.001	<0001	<0.0015	<0.001
	11/17/14	8260B	<0.001	<0.001	<0001	<0.0015	<0.001
	09/24/14	8260B	<0.001	<0.001	<0001	<0.0015	<0.001
	04/09/14	8260B	<0.002	<0.002	<0.002	<0.003	<0.002
MKTF-35	06/04/15	8260B	**0.79**	0.0023	0.19	0.0021	0.027
	03/17/15	8260B	**0.47**	0.0052	0.32	0.17	0.033
	11/21/14	8260B	**0.039**	<0.001	0.052	0.073	0.066

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103			0.01	**0.75**	0.75	**0.62**	NE
40 CFR 141.62 MCL (April 2014)			**0.005**	1.0	**0.7**	10	NE
NMED Tap Water (December 2014)			0.00454	1.1	0.0149	0.193	**0.143**
EPA RSL for Tap Water (November 2014)			0.00045	1.1	0.0015	0.19	0.014
WELL ID	**DATE SAMPLED**	**METHOD**					
MKTF-36	06/04/15	8260B	**8.1**	0.034	**1.6**	0.14	**8.4**
	03/17/15	8260B	**8.3**	0.023	**1.4**	0.078	**8.3**
	11/21/14	8260B	**8.4**	0.032	**1.5**	0.56	**7.2**
MKTF-37	06/04/15	8260B	**1.2**	0.058	0.017	**0.93**	0.054
	03/17/15	8260B	**0.82**	0.27	0.029	0.49	0.057
	11/21/14	8260B	**0.14**	0.2	0.0093	**1.3**	0.027
MKTF-38	03/16/15	8260B	**0.0092**	0.018	<0.001	<0.0015	0.006
	11/21/14	8260B	0.0028	<0.001	0.0029	0.0031	0.0074
MKTF-39	03/16/15	8260B	**0.016**	<0.002	0.039	<0.003	<0.002
	11/18/14	8260B	**0.02**	<0.005	0.06	<0.0075	<0.005
MKTF-40	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/21/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.001
MKTF-41	03/12/15	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/18/14	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
MKTF-42	03/11/15	8260B	0.0017	<0.001	<0.001	0.01	<0.001
	11/18/14	8260B	**0.012**	<0.01	<0.01	0.056	<0.01
MKTF-43	03/11/15	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
	11/18/14	8260B	<0.001	<0.001	<0.001	<0.0015	<0.001
MKTF-44	03/12/15	8260B	<0.002	<0.002	<0.002	<0.003	<0.002
	11/21/14	8260B	<0.002	<0.002	<0.002	<0.003	<0.002
SB24	4/3/2014	8260B	**0.43**	0.003	0.021	0.039	**0.27**
SB27	4/3/2014	8260B	**2.2**	0.17	**1.1**	**4.1**	**0.26**

DEFINITIONS

NE = Not established

NA = Not analyzed

Bold and highlighted values represent values above the applicable standards

STANDARDS

WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.

40 CFR Part 141 National Primary Driking Water Regulations - Maximum Contaminant Levels (MCLs)

New Mexico Environment Department Tap Water Screening Levels December 2014

EPA Regional Screening Level (RSL) Tap Water Screening Levels November 2014

Applicable screening levels per Gallup's RCRA Permit Section IV.D.1 bolded

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			DRO (mg/L)	GRO (mg/L)	MRO (mg/L)	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	**1.6**	**250.0**	NE	NE	**10**	NE	**600.0**
40 CFR 141.62 MCL (April 2014)			NE	NE	NE	NE	NE	NE	**1**	10	NE	NE
NMED Tap Water (December 2014)			NE	NE	NE	1.2	NE	NE	1.97	31.6	NE	NE
EPA RSL for Tap Water (November 2014)			NE	NE	NE	0.8	NE	NE	2	32	NE	NE
WELL ID	**DATE SAMPLED**	**METHOD**										
MKTF-1 / HA1	03/11/15	8015D	370	31	<50	NA	NA	NA	NA	NA	NA	NA
	06/06/14	300.0/8015D	510	50	<50	0.6	**400**	0.96	<1.0	<1.0	<0.5	0.58
	07/17/13	8015D	3.3	19	<5	NA	NA	NA	NA	NA	NA	NA
HA2	07/17/13	8015D	3.1	16	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-2 / HA3	03/11/15	8015D	<1.0	1.3	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	<1.0	0.061	<5.0	<1.0	**830**	1.2	<1.0	<1.0	<5.0	230
	09/18/14	8015D	1.7	6.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/06/14	300.0/8015D	<1.0	1.5	<5.0	0.76	**750**	0.5	<1.0	<1.0	<0.5	200
	04/08/14	8015D	<1.0	0.67	<5.0	NA	NA	NA	NA	NA	NA	NA
	10/28/13	8015D	<1.0	3.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	07/17/13	8015D	4.8	25	<5.0	NA	NA	NA	NA	NA	NA	NA
HA4	07/17/13	8015D	17	17	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-4 / SB03	06/04/15	8015D	2.3	6.2	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/16/15	8015D	1.9	4.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/13/14	300.0/8015D	2.0	4.2	<5.0	<1.0	250	2.1	<1.0	<1.0	<5.0	26
	09/15/14	8015D	1.5	3.4	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/04/14	300.0/8015D	2.9	8.2	<5.0	0.7	0.19	1.8	<1.0	<1.0	<0.5	6.8
	04/11/14	8015D	4.5	9.4	<5.0	NA	NA	NA	NA	NA	NA	NA
SB07	10/28/13	8015D	24	21	<5.0	NA	NA	NA	NA	NA	NA	NA
SB12	10/28/13	8015D	110	22	<50	NA	NA	NA	NA	NA	NA	NA
MKTF-9 / SB13	06/04/15	8015D	1.8	4.1	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/16/15	8015D	<1.0	3.3	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	2.1	4.4	<5.0	<1.0	180	1.2	<1.0	<1.0	<5.0	140
	09/18/14	8015D	1.4	5.6	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/05/14	300.0/8015D	2.7	6.2	<5.0	0.43	180	1.1	<1.0	<1.0	<0.5	78
	04/14/14	8015D	3.6	5.7	<5.0	NA	NA	NA	NA	NA	NA	NA
SB14	10/28/13	8015D	87	71	<50	NA	NA	NA	NA	NA	NA	NA
SB15	10/28/13	8015D	4.8	46	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-10 / SB16	06/04/15	8015D	23	79	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/16/15	8015D	32	80	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	74	84	<50	**270**	**260**	<1.0	<2.0	<2.0	<5.0	<5.0
	09/18/14	8015D	7.7	88	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/06/14	8015D	5.5	64	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/11/14	8015D	5.9	88	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-11 / SB17	06/04/15	8015D	2.8	71	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/16/15	8015D	2.6	55	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/13/14	300.0/8015D	1.8	35	<5.0	**6.5**	**780**	<1.0	<1.0	<1.0	<5.0	<5.0
	09/15/14	8015D	1.8	57	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/05/14	300.0/8015D	2.6	48	<5.0	**7.0**	**480**	0.67	<1.0	<1.0	<0.5	11
	04/11/14	8015D	2.7	53	<5.0	NA	NA	NA	NA	NA	NA	NA
SB18	07/25/13	8015D	73	73	<5.0	NA	NA	NA	NA	NA	NA	NA
SB19	07/25/13	8015D	30	19	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-15 / SB31	09/17/14	8015D	17	88	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/05/14	300.0/8015D	10	57	<5.0	<2.0	**5200**	<2.0	<4.0	<4.0	<0.5	1.2
	04/10/14	8015D	4.1	71	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/01/13	8015D	2.4	65	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-16 / SB32	03/16/15	8015D	2.9	61	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	300.0/8015D	2.7	53	<5.0	1.5	**700**	1.8	<0.5	<0.5	<2.5	<2.5
	09/17/14	8015D	4.6	66	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/05/14	300.0/8015D	5.7	71	<5.0	1.1	**540**	1.7	<1.0	<1.0	<2.5	<2.5
	04/10/14	8015D	3.5	67	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/19/13	8015D	4.2	68	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-17 / SB33	03/12/15	8015D	<1.0	0.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	300.0/8015D	1.4	1.2	<5.0	0.66	84	0.44	<0.1	<0.1	<0.5	200
	09/18/14	8015D	1.5	3.3	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/06/14;06/16/14[1]	8015D	4.2	8.3	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	2.6	8.6	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/19/13	8015D	5.8	17	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-18 / SB34	03/17/15	8015D	5.4	1.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	300.0/8015D	2.3	1.4	<5.0	0.68	160	0.81	<0.5	<0.5	<2.5	<2.5
	09/18/14	8015D	3.1	1.4	<5.0	NA	NA	NA	NA	NA	NA	NA
	06/06/14	300.0/8015D	7.8	2.2	<5.0	0.65	170	0.81	<1.0	<1.0	<0.5	0.95
	04/14/14	8015D	4.4	2.2	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/19/13	8015D	11	4	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-19 / SB35	03/12/15	8015D	9.3	14	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	300.0/8015D	13	20	<5.0	<0.5	110	1.2	<0.5	<0.5	<2.5	<2.5
	09/24/14	8015D	61	16	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	17	18	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/05/13	8015D	7.2	10	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-20	03/16/15	8015D	4.5	37	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	300.0/8015D	24	45	<5.0	0.87	82	<0.5	<0.5	<0.5	<2.5	16
	04/11/14	8015D	16	120	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-21	03/16/15	8015D	3.8	16	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/11/14	8015D	27	78	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-22 / SB23	03/12/15	8015D	2.5	13	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	1.6	6.8	<5.0	0.38	96	<0.1	**7.1 [1]**	7.1 [1]	<0.5	19
	04/10/14	8015D	2.6	10	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/19/13	8015D	2.1	6.5	<5.0	NA	NA	NA	NA	NA	NA	NA
SB24	11/05/13	8015D	<1.0	5.7	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-23 / SB25	03/12/15	8015D	14	35	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	7.7	26	<5.0	0.43	**390**	<0.1	<1.0	<1.0	<0.5	5.9
	09/23/14	8015D	14	23	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/05/13	8015D	1.1	12	<5.0	NA	NA	NA	NA	NA	NA	NA

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			DRO (mg/L)	GRO (mg/L)	MRO (mg/L)	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	**1.6**	**250.0**	NE	NE	**10**	NE	**600.0**
40 CFR 141.62 MCL (April 2014)			NE	NE	NE	NE	NE	NE	**1**	10	NE	NE
NMED Tap Water (December 2014)			NE	NE	NE	1.2	NE	NE	1.97	31.6	NE	NE
EPA RSL for Tap Water (November 2014)			NE	NE	NE	0.8	NE	NE	2	32	NE	NE
WELL ID	**DATE SAMPLED**	**METHOD**										
MKTF-24 / SB26	03/11/15	8015D	<1.0	9.2	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	<1.0	5.7	<5.0	<1.0	**630**	1.4	<1.0	<1.0	<5.0	72
	09/24/14	8015D	<1.0	6.3	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/08/14	8015D	<1.0	4.2	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/01/13	8015D	1.5	8.4	<5.0	NA	NA	NA	NA	NA	NA	NA
SB27	11/01/13	8015D	5.8	37	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-25 / SB28	03/11/15	8015D	1.1	10	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	<1.0	4.8	<5.0	<1.0	**880**	1.4	<1.0	<1.0	<5.0	35
	04/08/14	8015D	1.2	6.9	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-26 / SB29	03/11/14	8015D	<1.0	2.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	<1.0	2.0	<5.0	<1.0	**1500**	1.2	<2.0	<2.0	<5.0	160
	09/24/14	8015D	<1.0	2.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/08/14	8015D	<1.0	0.2	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/01/13	8015D	<1.0	1.7	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-27 / SB30	03/11/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	<1.0	<0.05	<5.0	<1.0	**2500**	1.8	<2.0	<2.0	<5.0	470
	09/24/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/08/14	8015D	<1.0	<0.01	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/19/13	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-28	03/11/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/14/14	300.0/8015D	<1.0	<0.05	<5.0	<1.0	**540**	2.7	<1.0	<1.0	<5.0	260
	09/24/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-29	03/11/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	09/24/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-30	03/11/15	8015D	<1.0	0.053	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	<1.0	0.054	<5.0	0.56	**1400**	1.3	<1.0	<1.0	<0.5	**730**
	09/24/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-31	03/11/15	8015D	<1.0	0.077	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	<1.0	0.068	<5.0	<0.1	**920**	<0.1	<1.0	<1.0	<0.5	82
	09/23/14	8015D	<1.0	0.061	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/08/14	8015D	<1.0	0.11	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-32	03/12/15	8015D	<1.0	0.46	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	<1.0	0.28	<5.0	0.27	**610**	1.3	<1.0	<1.0	<0.5	100
	09/23/14	8015D	<1.0	0.23	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	<1.0	0.22	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-33	03/12/15	8015D	<1.0	0.35	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	<1.0	0.36	<5.0	0.31	98	0.61	<1.0	<1.0	<0.5	360
	09/23/14	8015D	<1.0	0.25	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	<1.0	0.21	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-34	03/12/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/17/14	300.0/8015D	<1.0	<0.05	<5.0	0.54	**400**	2.2	**6.6** [1]	6.6 [1]	<0.5	73
	09/24/14	8015D	<1.0	0.25	<5.0	NA	NA	NA	NA	NA	NA	NA
	04/09/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-35	06/04/15	8015D	2.3	2.9	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/17/15	8015D	6	3.7	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/21/14	8015D	3.3	1.6	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-36	06/04/15	8015D	13	30	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/17/15	8015D	10	38	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/21/14	8015D	6.8	25	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-37	06/04/15	8015D	5.7	12	<5.0	NA	NA	NA	NA	NA	NA	NA
	03/17/15	8015D	4.5	11	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/21/14	8015D	<1.0	8.7	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-38	03/16/15	8015D	<1.0	0.33	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/21/14	8015D	3.8	0.12	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-39	03/16/15	8015D	6.2	0.21	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	8015D	15	0.39	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-40	03/11/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/21/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-41	03/12/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-42	03/11/15	8015D	27	<0.50	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	8015D	44	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-43	03/11/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/18/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
MKTF-44	03/12/15	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
	11/21/14	8015D	<1.0	<0.05	<5.0	NA	NA	NA	NA	NA	NA	NA
SB24	4/3/2014	300.0/8015D	<1.0	1.4	<5.0	0.22	**530**	0.91	<1.0	<1.0	<0.5	560
SB27	4/3/2014	300.0/8015D	3.6	34	<5.0	0.29	**540**	0.1	<1.0	<1.0	<0.5	8

DEFINITIONS
NE = Not established
NA = Not analyzed
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
40 CFR Part 141 National Primary Driking Water Regulations - Maximum Contaminant Levels (MCLs)
New Mexico Environment Department Tap Water Screening Levels December 2014
EPA Regional Screening Level (RSL) Tap Water Screening Levels November 2014
Applicable screening levels per Gallup's RCRA Permit Section IV.D.1 bolded

1) - reported as nitrite + nitrate

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103[1]			0.1000	1.0	0.01	0.05	1.0	1.0	0.05	0.2	0.05	0.05	0.002	0.03	10
40 CFR 141.62 MCL (April 2014)			**0.0100**	**2.0**	**0.005**	NE	NE	NE	**0.015 [2]**	NE	**0.05**	NE	**0.002**	**0.03**	NE
NMED Tap Water (December 2014)			0.0051	3.3	0.00624	**0.00559**	**0.79**	**13.8**	NE	**2.02**	0.0987	**0.0812**	0.00626	0.00592	**5.96**
EPA RSL for Tap Water (November 2014)			0.0001	3.8	0.0092	NE	0.8	14	0.015	0.43	0.1	0.094	0.00063	0.06	6
WELL ID	**DATE SAMPLED**	**METHOD**													
MKTF-1 / HA1	03/11/15	200.7/200.8	0.0032	**2.1**	<0.002	<0.006	<0.006	5.6	0.002	1.9	0.0056	<0.005	<0.0002	<0.001	<0.01
	06/06/14	200.7/200.8	0.0070	**4.7**	<0.002	**0.035**	0.038	**35**	**0.074**	**4.1**	0.0091	<0.005	<0.0002	<0.005	0.078
MKTF-2 / HA3	03/11/15	200.7/200.8	0.0046	0.21	<0.002	<0.006	0.0074	4.6	0.0057	0.64	0.0043	<0.005	<0.0002	**0.048**	0.017
	11/14/14	200.7/200.8	0.0059	0.22	<0.002	<0.006	0.012	7.0	0.0079	0.68	<0.01	<0.005	<0.0002	**0.073**	0.03
	09/18/14	200.7/200.8	0.0017	0.15	<0.002	<0.006	<0.006	0.15	<0.001	0.6	0.0031	<0.005	<0.0002	0.013	<0.01
	06/06/14	200.7/200.8	<0.005	0.2	<0.002	<0.006	<0.006	4.2	<0.005	0.7	0.0069	<0.005	<0.0002	**0.056**	0.017
MKTF-4 SB03	06/04/15	200.7/200.8	0.0082	**2.5**	<0.002	**0.0087**	<0.006	13	0.0097	1.9	<0.01	<0.005	<0.0002	0.0053	0.017
	03/16/15	200.7/200.8	<0.01	1.8	<0.002	**0.0092**	0.012	11	**0.022**	**2.5**	0.016	<0.005	<0.0002	0.017	0.03
	11/13/14	200.7/200.8	0.0079	1.9	<0.002	**0.0086**	0.015	**15**	**0.023**	**2.5**	<0.05	<0.005	<0.0002	0.013	0.03
	09/15/14	200.7/200.8	0.0060	2	<0.002	**0.015**	0.021	**20**	**0.036**	**2.9**	0.0078	<0.005	<0.0002	0.02	0.044
	06/04/14	200.7/200.8	0.0061	1.4	<0.002	**0.0085**	0.013	7.9	0.013	**2.1**	0.013	<0.005	<0.0002	0.009	0.02
MKTF-9 / SB13	06/04/15	200.7/200.8	<0.005	0.34	<0.002	<0.006	<0.006	3.1	<0.0025	**3**	<0.005	<0.005	<0.0002	0.0076	<0.01
	03/16/15	200.7/200.8	0.0029	0.22	<0.002	<0.002	<0.002	2	0.0015	**2.4**	0.0053	<0.005	<0.0002	0.014	0.01
	11/14/14	200.7/200.8	<0.005	0.39	<0.002	<0.006	<0.006	4.5	0.0053	**2.7**	<0.01	<0.005	<0.0002	0.01	0.013
	09/18/14	200.7/200.8	<0.005	0.33	<0.002	<0.006	<0.006	2.4	<0.001	**2.8**	<0.005	<0.005	<0.0002	0.012	<0.01
	06/05/14	200.7/200.8	<0.005	0.58	<0.002	<0.006	<0.006	6.7	0.0058	**3.8**	0.0073	<0.005	<0.0002	0.006	0.015
MKTF-10 / SB16	06/04/15	200.7/200.8	**0.0150**	**19**	<0.002	**0.077**	0.01	**120**	**0.19**	**24**	<0.01	<0.005	<0.0002	0.014	0.15
	03/16/15	200.7/200.8	**0.0190**	**22**	<0.002	**0.036**	0.095	**100**	**0.2**	**27**	<0.01	<0.005	<0.0002	0.019	0.14
	11/14/14	200.7/200.8	<0.04	**45**	<0.004	**0.099**	0.24	**250**	**0.58**	**49**	<0.04	<0.01	<0.0004	**0.052**	0.31
	09/18/14	200.7/200.8	<0.005	**12**	<0.002	<0.006	<0.006	**46**	0.0015	**15**	0.0032	<0.005	<0.0002	0.0013	<0.01
	06/06/14	200.7/200.8	<0.005	**7.7**	<0.002	<0.006	<0.006	**25**	<0.005	**9.5**	0.0061	<0.005	<0.0002	<0.005	<0.01
MKTF-11 / SB17	06/04/15	200.7/200.8	0.0056	**2.7**	<0.002	<0.006	<0.006	13	0.0027	**3**	<0.005	<0.005	<0.0002	<0.0025	0.013
	03/16/15	200.7/200.8	0.0086	**1.9**	<0.002	<0.006	<0.006	10	0.0068	**3.1**	0.006	<0.005	<0.0002	0.0021	0.024
	11/13/14	200.7/200.8	0.0087	**1.7**	<0.002	<0.006	<0.006	5.8	<0.005	**3.4**	<0.005	<0.005	<0.0002	<0.005	0.012
	09/15/14	200.7/200.8	0.0072	**1.4**	<0.002	<0.006	<0.006	8.1	0.0062	**3.1**	0.0029	<0.005	<0.0002	0.0058	0.021
	06/05/14	200.7/200.8	0.0063	**1.2**	<0.002	**0.0061**	<0.006	8.8	0.0096	**2.8**	0.0055	<0.005	<0.0002	<0.005	0.038
MKTF-15 / SB31	09/17/14	200.7/200.8	<0.005	**29**	<0.002	<0.006	<0.006	**18**	<0.01	**9.8**	<0.005	<0.005	<0.0002	<0.01	0.023
	06/05/14	200.7/200.8	<0.01	**25**	<0.002	**0.0074**	<0.006	11	0.011	**7.9**	<0.01	<0.005	<0.0002	<0.005	0.017
MKTF-16 / SB32	03/16/15	200.7/200.8	<0.01	1	<0.002	<0.006	0.023	7.2	<0.01	1.3	<0.02	<0.005	<0.0002	<0.01	0.035
	11/18/14	200.7/200.8	0.0100	1.1	<0.002	<0.006	<0.006	10	0.0042	1.3	<0.05	<0.005	<0.0002	0.0016	0.05
	09/17/14	200.7/200.8	**0.0120**	0.8	<0.002	<0.006	<0.006	8.6	0.0031	1.2	<0.01	<0.005	<0.0002	<0.001	0.034
	06/05/14	200.7/200.8	**0.0230**	0.9	<0.002	<0.006	0.008	7.9	<0.005	1.2	0.013	<0.005	<0.0002	0.015	0.089
MKTF-17 / SB33	03/12/15	200.7/200.8	0.0057	0.17	<0.002	<0.006	<0.006	1.8	0.0017	**3.1**	0.0023	<0.005	<0.0002	0.022	<0.01
	11/18/14	200.7/200.8	0.0051	0.21	<0.002	<0.006	<0.006	2.0	0.0031	**3.0**	<0.01	<0.005	<0.002	0.025	0.019
	09/18/14	200.7/200.8	0.0055	0.21	<0.002	<0.006	<0.006	1.8	0.0016	**3.3**	0.0019	<0.005	<0.0002	0.022	0.013
	06/16/14	200.7/200.8	0.0063	0.61	<0.002	**0.013**	0.012	10	**0.022**	**4.1**	0.0045	<0.005	<0.0002	0.027	0.036

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103[1]			0.1000	1.0	0.01	0.05	1.0	1.0	0.05	0.2	0.05	0.05	0.002	0.03	10
40 CFR 141.62 MCL (April 2014)			**0.0100**	**2.0**	**0.005**	NE	NE	NE	**0.015 [2]**	NE	**0.05**	NE	**0.002**	**0.03**	NE
NMED Tap Water (December 2014)			0.0051	3.3	0.00624	**0.00559**	**0.79**	**13.8**	NE	**2.02**	0.0987	**0.0812**	0.00626	0.00592	**5.96**
EPA RSL for Tap Water (November 2014)			0.0001	3.8	0.0092	NE	0.8	14	0.015	0.43	0.1	0.094	0.00063	0.06	6
WELL ID	**DATE SAMPLED**	**METHOD**													
MKTF-18 / SB34	03/17/15	200.7/200.8	0.0031	**3.5**	<0.002	**0.012**	0.011	**14**	**0.021**	**2.7**	<0.01	<0.005	<0.0002	0.0026	0.051
	11/18/14	200.7/200.8	0.0019	**2.5**	<0.002	<0.006	<0.006	4.0	0.0016	1.8	<0.01	<0.005	<0.0002	<0.001	0.02
	09/18/14	200.7/200.8	0.0015	**2.6**	<0.002	<0.006	<0.006	3.2	0.0028	2.0	0.0025	<0.005	<0.0002	0.0015	0.018
	06/06/14	200.7/200.8	**0.0130**	**19**	<0.01	**0.11**	0.12	**81**	**0.29**	**17**	0.013	<0.025	<0.0002	0.022	0.31
MKTF-19 / SB35	03/12/15	200.7/200.8	**0.0170**	**2.7**	<0.002	**0.022**	0.026	**33**	**0.052**	**4.2**	<0.01	<0.005	<0.0002	0.0065	0.078
	11/18/14	200.7/200.8	**0.0220**	**3.6**	<0.002	**0.035**	0.043	**47**	**0.079**	**5.6**	<0.01	<0.005	<0.0002	0.014	0.11
MKTF-20	03/16/15	200.7/200.8	**0.0250**	**2**	<0.002	<0.006	0.016	11	0.0066	**3.2**	0.0046	<0.005	<0.0002	0.011	0.03
	11/18/14	200.7/200.8	**0.0170**	**4.5**	<0.002	**0.022**	0.12	**45**	**0.048**	**4.9**	<0.005	<0.005	<0.0002	0.0066	0.19
MKTF-21	03/16/15	200.7/200.8	**0.0200**	**4.9**	<0.002	**0.029**	0.1	**55**	**0.079**	**6.4**	0.01	<0.005	<0.0002	0.0066	0.44
MKTF-22 / SB23	03/12/15	200.7/200.8	<0.01	**2.1**	<0.002	**0.018**	0.015	**21**	**0.035**	**3.5**	<0.01	<0.005	<0.0002	0.0047	0.038
	11/17/14	200.7/200.8	0.0028	1.1	<0.002	<0.006	<0.006	**15**	0.014	**3.0**	0.004	<0.005	<0.0002	0.0041	0.025
MKTF-23 / SB25	03/12/15	200.7/200.8	**0.0130**	0.64	<0.002	<0.006	<0.006	5.2	0.0035	1.8	0.01	<0.005	<0.0002	0.0062	0.011
	11/17/14	200.7/200.8	**0.0110**	0.49	<0.002	<0.006	<0.006	6.2	0.005	1.6	0.0067	<0.005	<0.0002	0.016	0.035
MKTF-24 / SB26	03/11/15	200.7/200.8	<0.01	0.71	<0.002	**0.014**	0.019	12	**0.02**	**2.2**	<0.01	<0.005	<0.0002	**0.046**	0.031
	11/14/14	200.7/200.8	<0.005	0.48	<0.002	**0.0098**	0.015	6.9	0.012	1.9	<0.01	<0.005	<0.0002	**0.038**	0.026
MKTF-25 / SB28	03/11/15	200.7/200.8	0.0041	0.58	<0.002	**0.0064**	0.014	7.5	0.013	**3.9**	0.0058	<0.005	<0.0002	**0.038**	0.017
	11/14/14	200.7/200.8	<0.005	0.37	<0.002	<0.006	0.011	2.7	0.0074	**3.6**	<0.01	<0.005	<0.0002	0.03	0.013
MKTF-26 / SB29	03/11/15	200.7/200.8	0.0040	0.2	<0.002	<0.006	<0.006	3.1	0.0029	1.3	0.0047	<0.005	<0.0002	**0.045**	0.012
	11/14/14	200.7/200.8	<0.005	0.15	<0.002	<0.006	<0.006	1.3	<0.005	1.4	<0.01	<0.005	<0.002	**0.077**	0.014
MKTF-27 / SB30	03/11/15	200.7/200.8	<0.01	0.13	<0.002	<0.006	<0.006	3.3	<0.01	0.27	<0.01	<0.005	<0.0002	**0.071**	0.014
	11/14/14	200.7/200.8	<0.005	0.13	<0.002	<0.006	<0.006	3.4	<0.005	0.5	<0.01	<0.005	<0.0002	**0.087**	0.024
MKTF-29	03/11/15	200.7/200.8	0.0020	0.057	<0.002	<0.006	<0.006	0.81	<0.001	0.36	0.0023	<0.005	<0.0002	0.023	<0.01
MKTF-28	03/11/15	200.7/200.8	<0.01	0.14	<0.002	<0.006	<0.006	2.5	0.0028	0.097	0.013	<0.005	<0.0002	**0.17**	0.014
	11/14/14	200.7/200.8	0.0054	0.12	<0.002	<0.006	<0.006	2.0	<0.005	0.38	<0.05	<0.005	<0.0002	**0.11**	0.015
MKTF-30	03/11/15	200.7/200.8	<0.005	0.29	<0.002	**0.0072**	<0.006	8.6	0.011	0.64	0.0079	<0.005	<0.0002	**0.044**	0.021
	11/17/14	200.7/200.8	<0.005	0.26	<0.002	**0.007**	<0.006	8.0	0.009	0.72	0.01	<0.005	<0.0002	**0.039**	0.029
MKTF-31	03/11/15	200.7/200.8	<0.01	0.2	<0.002	<0.006	<0.006	2.2	<0.01	0.12	<0.01	<0.005	<0.0002	**0.056**	<0.01
	11/17/14	200.7/200.8	<0.005	0.22	<0.002	**0.007**	<0.006	2.9	0.0041	0.24	0.008	<0.005	<0.0002	**0.05**	0.017
MKTF-32	03/12/15	200.7/200.8	<0.01	0.085	<0.002	<0.006	<0.006	1.6	0.0018	0.12	0.01	<0.005	<0.0002	**0.067**	<0.01
	11/17/14	200.7/200.8	<0.005	0.091	<0.002	**0.007**	<0.006	2.0	0.0027	0.23	<0.01	<0.005	<0.0002	**0.067**	0.014
MKTF-33	03/12/15	200.7/200.8	<0.005	0.25	<0.002	**0.0062**	<0.006	3.7	0.0059	0.68	0.0041	<0.005	<0.0002	**0.045**	0.014
	11/17/14	200.7/200.8	0.0016	0.18	<0.002	<0.006	<0.006	3.3	0.005	0.92	0.0031	<0.005	<0.0002	**0.067**	0.043
MKTF-34	03/12/15	200.7/200.8	<0.01	0.25	<0.002	<0.006	<0.006	5.2	0.0045	0.15	0.013	<0.005	<0.0002	0.028	0.059
	11/17/14	200.7/200.8	<0.01	0.17	<0.002	<0.006	<0.006	2.4	0.0014	0.075	<0.02	<0.005	<0.0002	0.026	0.037
MKTF-35	06/04/15	200.7/200.8	<0.005	**5**	<0.002	**0.018**	0.013	13	**0.023**	**6.4**	<0.005	<0.005	<0.0002	0.0044	0.032
	03/17/15	200.7/200.8	0.0040	**8.2**	<0.002	**0.013**	0.025	**15**	**0.034**	**6.3**	<0.005	<0.005	<0.0002	0.0053	0.062
MKTF-36	06/04/15	200.7/200.8	**0.0170**	**6.8**	<0.002	**0.0096**	0.0078	**22**	0.016	**2.8**	<0.005	<0.005	<0.0002	<0.0025	0.023
	03/17/15	200.7/200.8	**0.0160**	**7**	<0.002	<0.006	<0.006	**22**	0.015	**2.8**	0.0057	<0.005	<0.0002	0.0016	0.028

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103[1]			0.1000	1.0	0.01	0.05	1.0	1.0	0.05	0.2	0.05	0.05	0.002	0.03	10
40 CFR 141.62 MCL (April 2014)			**0.0100**	**2.0**	**0.005**	NE	NE	NE	**0.015 [2]**	NE	**0.05**	NE	**0.002**	**0.03**	NE
NMED Tap Water (December 2014)			0.0051	3.3	0.00624	**0.00559**	**0.79**	**13.8**	NE	**2.02**	0.0987	**0.0812**	0.00626	0.00592	**5.96**
EPA RSL for Tap Water (November 2014)			0.0001	3.8	0.0092	NE	0.8	14	0.015	0.43	0.1	0.094	0.00063	0.06	6
WELL ID	**DATE SAMPLED**	**METHOD**													
MKTF-37	06/04/15	200.7/200.8	<0.005	0.23	<0.002	**0.0063**	0.0097	4.8	**0.036**	**2.6**	<0.005	<0.005	<0.0002	0.024	0.044
	03/17/15	200.7/200.8	0.0032	0.23	<0.002	<0.006	0.012	5.1	**0.03**	**2.9**	0.0036	<0.005	<0.0002	0.026	0.14
MKTF-38	03/16/15	200.7/200.8	0.0031	0.34	<0.002	<0.006	<0.006	3.5	0.006	**3.1**	0.0058	<0.005	<0.0002	0.029	0.014
MKTF-39	03/16/15	200.7/200.8	<0.01	**35**	<0.01	<0.03	<0.03	**50**	**0.034**	**8.6**	<0.01	<0.025	0.00021	0.012	0.059
MKTF-40	03/11/15	200.7/200.8	<0.01	0.28	<0.002	<0.006	<0.006	5.6	<0.01	0.34	0.015	<0.005	<0.0002	**0.085**	0.023
MKTF-41	03/12/15	200.7/200.8	<0.01	0.19	<0.002	**0.0075**	<0.006	8.4	0.0061	0.22	0.059	<0.005	<0.0002	**0.034**	0.024
MKTF-42	03/11/15	200.7/200.8	0.0035	0.16	<0.002	<0.006	0.0071	2.5	0.0034	0.58	0.0075	<0.005	<0.0002	**0.039**	0.012
MKTF-43	03/11/15	200.7/200.8	<0.05	0.24	<0.01	**0.031**	<0.030	3.2	<0.02	**3.7**	0.071	<0.025	<0.0002	**0.14**	<0.05
MKTF-44	03/12/15	200.7/200.8	<0.01	0.22	<0.002	**0.023**	0.0079	**16**	**0.016**	0.34	0.015	<0.005	<0.0002	**0.22**	0.056
SB24	04/03/14	200.7/200.8	<0.005	0.16	<0.002	**0.0071**	<0.006	5.9	0.0025	0.71	<0.005	<0.005	<0.0002	0.014	0.022
SB-27	04/03/14	200.7/200.8	<0.005	**2.1**	<0.002	<0.006	0.011	9.2	**0.016**	**2.8**	<0.005	<0.005	<0.0002	0.0061	0.024

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
40 CFR Part 141 National Primary Driking Water Regulations - Maximum Contaminant Levels (MCLs)
New Mexico Environment Department Tap Water Screening Levels December 2014
EPA Regional Screening Level (RSL) Tap Water Screening Levels November 2014
Applicable screening levels per Gallup's RCRA Permit Section IV.D.1 bolded

NOTES
Reported values represent total concentrations
1 - WQCC standards listed for reference only as they apply to the dissolved portion and not total
2) National Primary Drinking Water Regulation (May 2009); Action Level

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Silver (mg/L)	Selenium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			0.1000	**1.0**	0.01	**0.05**	**1.0**	**1.0**	0.05	**0.200**	**0.05**	**0.050**	**0.03**	**10.00**
40 CFR 141.62 MCL (April 2014)			**0.0100**	2.0	**0.005**	NE	NE	NE	**0.015** [1]	NE	NE	0.050	0.03	NE
NMED Tap Water (December 2014)			0.0051	3.3	0.00624	0.00559	0.79	13.8	NE	2.020	0.0812	0.099	0.00592	5.96
EPA RSL for Tap Water (November 2014)			0.0001	3.8	0.0092	NE	0.8	14	0.015	0.430	0.094	0.100	0.06	6.00
WELL ID	**DATE SAMPLED**	**METHOD**												
MKTF-1 / HA1	03/11/15	200.7/200.8	<0.01	**2**	<0.002	<0.006	<0.006	**4.4**	<0.001	**1.900**	<0.005	<0.02	<0.001	<0.01
	06/06/14	200.7/200.8	<0.005	**1.4**	<0.002	<0.006	<0.006	**4.7**	<0.005	**1.700**	<0.005	0.013	<0.01	0.028
MKTF-2 / HA3	03/11/15	200.7/200.8	0.0047	0.13	<0.002	<0.006	<0.006	0.11	<0.001	**0.560**	<0.005	0.008	**0.049**	<0.01
	11/14/14	200.7/200.8	<0.01	0.13	<0.002	<0.006	<0.006	**2.2**	<0.01	**0.510**	<0.005	<0.01	**0.059**	0.027
	09/18/14	200.7/200.8	<0.005	0.15	<0.002	<0.006	<0.006	0.029	<0.001	**0.590**	<0.005	<0.005	0.0012	0.041
	06/06/14	200.7/200.8	<0.005	0.13	<0.002	<0.006	<0.006	0.34	<0.005	**0.560**	<0.005	0.012	**0.056**	0.010
MKTF-4 / SB03	06/04/15	200.7/200.8	<0.01	**2.2**	<0.002	<0.006	<0.006	**8.6**	<0.01	**1.600**	<0.005	<0.1	<0.01	0.023
	03/16/15	200.7/200.8	0.0097	**1.1**	<0.002	<0.006	<0.006	**2**	<0.005	**1.900**	<.005	<0.05	0.013	0.021
	11/13/14	200.7/200.8	0.0060	**1.3**	<0.002	<0.006	<0.006	**4.7**	<0.005	**1.800**	<.005	<0.005	0.013	0.010
	09/15/14	200.7/200.8	<0.01	0.78	<0.002	<0.006	<0.006	**3.6**	0.0013	**1.700**	<0.005	<0.1	0.018	<0.1
	06/04/14	200.7/200.8	0.0078	**1.9**	<0.002	<0.006	<0.006	**2.5**	<0.005	**1.400**	<0.005	0.022	<0.01	<0.01
MKTF-9 / SB13	06/04/15	200.7/200.8	<0.01	0.31	<0.002	<0.006	<0.006	**1.9**	<0.01	**3.200**	<0.005	<0.01	<0.01	0.012
	03/16/15	200.7/200.8	<0.005	0.19	<0.002	<0.006	<0.006	**1.4**	<0.001	**2.300**	<0.005	<0.01	0.012	0.039
	11/14/14	200.7/200.8	<0.01	0.34	<0.002	<0.006	<0.006	**2.4**	<0.01	**2.800**	<0.005	<0.01	<0.01	0.017
	09/18/14	200.7/200.8	<0.01	0.32	<0.002	<0.006	<0.006	**2.2**	<0.001	**2.600**	<0.005	<0.01	0.012	<0.01
	06/05/14	200.7/200.8	<0.005	0.44	<0.002	<0.006	<0.006	**3.4**	<0.005	**3.600**	<0.005	0.014	<0.01	<0.01
MKTF-10 / SB16	06/04/15	200.7/200.8	<0.01	**12**	<0.002	<0.006	<0.006	**53**	<0.01	**18.000**	<0.005	<0.01	<0.01	0.034
	03/16/15	200.7/200.8	<0.005	**12**	<0.002	<0.006	<0.006	**49**	<0.001	**17.000**	<0.005	0.007	<0.001	<0.01
	11/14/14	200.7/200.8	<0.01	**17**	<0.002	<0.006	<0.006	**67**	<0.01	**24.000**	<0.005	<0.01	<0.01	0.018
	09/18/14	200.7/200.8	<0.005	**11**	<0.002	<0.006	<0.006	**33**	<0.001	**14.000**	<0.005	<0.005	<0.001	<0.01
	06/06/14	200.7/200.8	<0.005	**8.1**	<0.002	<0.006	<0.006	**18**	<0.005	**9.200**	<0.005	0.011	<0.01	<0.01
MKTF-11 / SB17	06/04/15	200.7/200.8	<0.01	**2.7**	<0.002	<0.006	<0.006	**9.9**	<0.01	**3.000**	<0.005	<0.01	<0.01	0.018
	03/16/15	200.7/200.8	0.0087	**2**	<0.002	<0.006	<0.006	**4.8**	<0.001	**2.900**	<0.005	0.008	0.0013	<0.01
	11/13/14	200.7/200.8	<0.01	**1.5**	<0.002	<0.006	<0.006	**3.4**	<0.001	**3.200**	<0.005	0.005	0.003	0.019
	09/15/14	200.7/200.8	0.0086	**1.1**	<0.002	<0.006	<0.006	**2.7**	<0.001	**2.400**	<0.005	<0.005	0.004	<0.01
	06/06/14	200.7/200.8	0.0064	**1.8**	<0.002	6.0E-03	<0.006	**11**	**0.022**	**3.600**	<0.005	0.010	<0.01	0.036
MKTF-15 / SB31	09/17/14	200.7/200.8	<0.01	**27**	<0.002	<0.006	<0.006	**13**	<0.01	**9.000**	<0.005	<0.01	<0.01	<0.01
	06/05/14	200.7/200.8	<0.005	**25**	<0.002	<0.006	<0.006	**11**	<0.005	**7.500**	<0.005	<0.01	<0.01	0.011
MKTF-16 / SB32	03/16/15	200.7/200.8	<0.01	0.94	<0.002	<0.006	<0.006	**5.6**	<0.001	**1.200**	<0.005	<0.02	<0.001	0.024
	11/18/14	200.7/200.8	**0.0110**	0.88	<0.002	<0.006	<0.006	**7.2**	<0.001	**1.100**	<0.005	<0.01	<0.001	0.019
	09/17/14	200.7/200.8	**0.0110**	0.81	<0.002	<0.006	<0.006	**7.3**	<0.001	**1.100**	<0.005	<0.01	<0.001	0.017
	06/05/14	200.7/200.8	**0.0130**	0.81	<0.002	<0.006	<0.006	**7.9**	<0.005	**1.300**	<0.005	0.017	<0.01	0.022
MKTF-17 / SB33	03/12/15	200.7/200.8	0.0062	0.13	<0.002	<0.006	<0.006	0.57	<0.001	**3.000**	<0.005	0.006	0.021	<0.01
	11/18/14	200.7/200.8	0.0047	0.14	<0.002	<0.006	<0.006	0.08	<0.001	**2.800**	<0.005	<0.01	0.022	0.027
	09/18/14	200.7/200.8	0.0053	0.16	<0.002	<0.006	<0.006	0.27	<0.001	**3.100**	<0.005	<0.005	0.022	0.018
	06/16/14	200.7/200.8	0.0054	0.24	<0.002	<0.006	<0.006	0.94	<0.005	**3.300**	<0.005	<0.005	0.022	0.140

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Silver (mg/L)	Selenium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			0.1000	**1.0**	0.01	**0.05**	**1.0**	**1.0**	0.05	**0.200**	**0.05**	**0.050**	**0.03**	**10.00**
40 CFR 141.62 MCL (April 2014)			**0.0100**	2.0	**0.005**	NE	NE	NE	**0.015** [1]	NE	NE	0.050	0.03	NE
NMED Tap Water (December 2014)			0.0051	3.3	0.00624	0.00559	0.79	13.8	NE	2.020	0.0812	0.099	0.00592	5.96
EPA RSL for Tap Water (November 2014)			0.0001	3.8	0.0092	NE	0.8	14	0.015	0.430	0.094	0.100	0.06	6.00
WELL ID	**DATE SAMPLED**	**METHOD**												
MKTF-18 / SB34	03/17/15	200.7/200.8	<0.01	**2.5**	<0.002	<0.006	<0.006	**3.8**	<0.001	**1.800**	<0.005	<0.01	<0.001	<0.01
	11/18/14	200.7/200.8	0.0020	**2.4**	<0.002	<0.006	<0.006	**3.4**	<0.001	**1.700**	<0.005	<0.01	<0.001	0.025
	09/18/14	200.7/200.8	<0.005	**2.3**	<0.002	<0.006	<0.006	0.3	<0.001	**1.700**	<0.005	<0.005	0.0012	0.012
	06/06/14	200.7/200.8	<0.005	**2.4**	<0.002	<0.006	<0.006	**4.5**	<0.005	**2.000**	<0.005	0.009	<0.01	<0.01
MKTF-19 / SB35	03/12/15	200.7/200.8	**0.0210**	1.6	<0.002	<0.006	<0.006	**9.5**	0.0017	**3.100**	<0.005	<0.02	<0.001	0.012
	11/18/14	200.7/200.8	**0.0220**	1.6	<0.002	<0.006	<0.006	**11**	0.0019	**3.000**	<0.005	<0.01	<0.001	0.018
MKTF-20	03/16/15	200.7/200.8	**0.0220**	2	<0.002	<0.006	<0.006	**8.6**	0.0013	**3.100**	<0.005	<0.01	0.0088	<0.01
	11/18/14	200.7/200.8	NA	NA	NA	NA	NA	NA	NA	**NA**	NA	NA	NA	NA
MKTF-21	03/16/15	200.7/200.8	**0.0110**	1.9	<0.002	<0.006	<0.006	**18**	0.012	**3.100**	<0.005	0.010	0.0012	0.074
MKTF-22 / SB23	03/12/15	200.7/200.8	0.0031	1.3	<0.002	<0.006	<0.006	**7.5**	0.0016	**2.300**	<0.005	0.007	0.0032	<0.01
	11/17/14	200.7/200.8	<0.005	0.78	<0.002	<0.006	<0.006	**6.8**	<0.001	**2.200**	<0.005	<0.005	0.0053	0.024
MKTF-23 / SB25	03/12/15	200.7/200.8	**0.0130**	0.61	<0.002	<0.006	<0.006	**4.4**	<0.001	**1.900**	<0.005	<0.02	0.0045	<0.01
	11/17/14	200.7/200.8	0.0100	0.57	<0.002	<0.006	<0.006	**3.1**	<0.001	**1.700**	<0.005	<0.01	0.013	0.018
MKTF-24 / SB26	03/11/15	200.7/200.8	<0.005	0.26	<0.002	<0.006	<0.006	0.34	0.0015	**1.200**	<0.005	0.011	**0.043**	0.018
	11/14/14	200.7/200.8	<0.005	0.29	<0.002	<0.006	<0.006	**4.4**	<0.005	**1.600**	<0.005	<0.005	**0.038**	<0.01
MKTF-25 / SB28	03/11/15	200.7/200.8	<0.01	0.26	<0.002	<0.006	<0.006	0.2	<0.001	**3.200**	<0.005	<0.02	**0.038**	0.017
	11/14/14	200.7/200.8	<0.005	0.28	<0.002	<0.006	<0.006	0.21	<0.005	**3.100**	<0.005	<0.005	0.03	0.100
MKTF-26 / SB29	03/11/15	200.7/200.8	<0.01	0.17	<0.002	<0.006	<0.006	0.85	<0.001	**1.400**	<0.005	<0.01	**0.045**	0.068
	11/14/14	200.7/200.8	<0.01	0.13	<0.002	<0.006	<0.006	0.18	<0.01	**1.400**	<0.005	<0.01	**0.066**	0.014
MKTF-27 / SB30	03/11/15	200.7/200.8	<0.01	0.086	<0.002	<0.006	<0.006	0.15	<0.01	0.100	<0.005	0.014	**0.075**	<0.01
	11/14/14	200.7/200.8	<0.01	0.094	<0.002	<0.006	<0.006	0.55	<0.01	**0.280**	<0.005	<0.01	**0.075**	0.030
MKTF-28	03/11/15	200.7/200.8	<0.01	0.09	<0.002	<0.006	<0.006	0.1	<0.001	0.006	<0.005	<0.05	**0.17**	<0.01
	11/14/14	200.7/200.8	<0.005	0.099	<0.002	<0.006	<0.006	0.6	<0.005	**0.320**	<0.005	<0.02	**0.12**	0.038
MKTF-29	03/11/15	200.7/200.8	0.0024	0.031	<0.002	<0.006	<0.006	<0.02	<0.001	**0.340**	<0.005	0.005	0.023	<0.01
MKTF-30	03/11/15	200.7/200.8	<0.01	0.036	<0.002	<0.006	<0.006	0.19	<0.01	0.018	<0.005	0.014	**0.041**	<0.01
	11/17/14	200.7/200.8	<0.01	0.036	<0.002	<0.006	<0.006	0.26	<0.001	0.021	<0.005	<0.01	**0.041**	0.039
MKTF-31	03/11/15	200.7/200.8	<0.01	0.17	<0.002	<0.006	<0.006	0.026	<0.001	0.032	<0.005	0.013	**0.054**	<0.01
	11/17/14	200.7/200.8	<0.005	0.17	<0.002	<0.006	<0.006	<0.02	<0.001	0.059	<0.005	0.008	**0.045**	0.027
MKTF-32	03/12/15	200.7/200.8	<0.01	0.057	<0.002	<0.006	<0.006	0.18	<0.001	0.080	<0.005	<0.02	**0.068**	0.014
	11/17/14	200.7/200.8	<0.005	0.064	<0.002	<0.006	<0.006	0.21	<0.001	0.094	<0.005	<0.01	**0.059**	0.010
MKTF-33	03/12/15	200.7/200.8	<0.01	0.061	<0.002	<0.006	<0.006	0.026	<0.001	**0.280**	<0.005	<0.01	**0.045**	0.017
	11/17/14	200.7/200.8	<0.005	0.064	<0.002	<0.006	<0.006	0.061	<0.001	**0.240**	<0.005	<0.005	**0.045**	0.016
MKTF-34	03/12/15	200.7/200.8	<0.01	0.12	<0.002	<0.006	<0.006	0.21	<0.001	0.013	<0.005	<0.05	0.025	<0.01
	11/17/14	200.7/200.8	<0.01	0.15	<0.002	<0.006	<0.006	<0.02	<0.001	0.004	<0.005	<0.02	0.027	0.051
MKTF-35	06/04/15	200.7/200.8	<0.005	0.36	<0.002	<0.006	<0.006	**2.6**	<0.005	**3.500**	<0.005	<0.005	<0.005	0.017
	03/17/15	200.7/200.8	<0.01	0.31	<0.002	<0.006	<0.006	**3.6**	0.0011	**3.500**	<0.005	<0.01	0.0026	<0.01
MKTF-36	06/04/15	200.7/200.8	**0.0160**	**6.6**	<0.002	<0.006	<0.006	**18**	<0.005	**2.400**	<0.005	<0.005	<0.005	0.012
	03/17/15	200.7/200.8	**0.0150**	**6.4**	<0.002	<0.006	<0.006	**19**	0.0034	**2.600**	<0.005	<0.01	<0.001	0.047

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Silver (mg/L)	Selenium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
WQCC 20NMAC 6.2.3103			0.1000	**1.0**	0.01	**0.05**	**1.0**	**1.0**	0.05	**0.200**	**0.05**	**0.050**	**0.03**	**10.00**
40 CFR 141.62 MCL (April 2014)			**0.0100**	2.0	**0.005**	NE	NE	NE	**0.015** [1]	NE	NE	0.050	0.03	NE
NMED Tap Water (December 2014)			0.0051	3.3	0.00624	0.00559	0.79	13.8	NE	2.020	0.0812	0.099	0.00592	5.96
EPA RSL for Tap Water (November 2014)			0.0001	3.8	0.0092	NE	0.8	14	0.015	0.430	0.094	0.100	0.06	6.00
WELL ID	**DATE SAMPLED**	**METHOD**												
MKTF-37	06/04/15	200.7/200.8	<0.01	0.19	<0.002	<0.006	<0.006	**1.8**	<0.01	**2.300**	<0.005	<0.01	0.023	0.039
	03/17/15	200.7/200.8	<0.005	0.16	<0.002	<0.006	<0.006	**1.1**	0.0071	**2.700**	<0.005	<0.01	0.021	0.029
MKTF-38	03/16/15	200.7/200.8	<0.01	0.14	<0.002	<0.006	<0.006	0.24	<0.001	**3.100**	<0.005	<0.01	0.025	0.096
MKTF-39	03/16/15	200.7/200.8	<0.01	**21**	<0.002	<0.006	<0.006	**31**	<0.005	**7.000**	<0.005	0.011	0.0099	<0.01
MKTF-40	03/11/15	200.7/200.8	<0.01	0.19	<0.002	<0.006	<0.006	0.11	<0.01	0.200	<0.005	<0.02	0.07	<0.01
MKTF-41	03/12/15	200.7/200.8	<0.01	0.081	<0.002	<0.006	<0.006	0.2	<0.001	0.024	<0.005	**0.059**	**0.034**	0.013
MKTF-42	03/11/15	200.7/200.8	<0.01	0.094	<0.002	<0.006	<0.006	0.11	<0.001	**0.540**	<0.005	0.015	**0.04**	0.036
MKTF-43	03/11/15	200.7/200.8	<0.05	0.17	<0.01	0.048	<0.03	0.49	<0.05	**3.700**	<0.025	**0.110**	**0.15**	<0.05
MKTF-44	03/12/15	200.7/200.8	<0.01	0.07	<0.002	0.0072	<0.006	0.85	0.0031	0.079	<0.005	0.017	**0.22**	0.011

DEFINITIONS
NE = Not established
NA = Not analyzed
NL = Not listed on laboratory analysis
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
40 CFR Part 141 National Primary Driking Water Regulations - Maximum Contaminant Levels (MCLs)
New Mexico Environment Department Tap Water Screening Levels December 2014
EPA Regional Screening Level (RSL) Tap Water Screening Levels November 2014
Applicable screening levels per Gallup's RCRA Permit Section IV.D.1 bolded

NOTES
Reported values represent dissolved concentrations
1) National Primary Drinking Water Regulation (May 2009); Action Level

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	1,2-Dichloro ethane (EDC) (mg/L)	1,2-Dibromoetha ne (EDB)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	*(Methyl ethyl ketone)* 2-Butanone (mg/L)	cis-1,2-DCE (mg/L)	1,1-Dichloro ethane (mg/L)	1,1-Dichloro ethene (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)	Tetrachloro ethene (PCE) (mg/L)	1,1,1-Trichloro ethane (mg/L)	1,1,2-Trichloro ethane (mg/L)	Trichloro ethene (TCE) (mg/L)	Vinyl Chloride (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.01	0.0001	NE	NE	NE	NE	NE	NE	**0.025**	**0.005**	NE	NE	NE	NE	NE	0.02	**0.06**	0.01	0.1	**0.001**
40 CFR 141.62 MCL (April 2014)			NE	NE	**0.005**	**0.00005**	NE	NE	NE	NE	NE	**0.07**	NE	0.007	NE	NE	NE	NE	NE	**0.005**	0.2	**0.005**	**0.005**	0.002
NMED Tap Water (December 2014)			NE	NE	0.00171	0.0000746	**0.00165**	NE	NE	**14.1**	**5.56**	0.00365	0.0275	0.284	NE	NE	NE	NE	NE	0.0403	8	0.000415	0.00282	0.000201
EPA RSL for Tap Water (November 2014)			**0.015**	**0.12**	0.00017	0.0000075	0.00017	**0.0011**	**0.036**	14	5.6	0.036	0.0027	0.28	NE	NE	**1**	**0.66**	**2**	0.011	8	0.00028	0.00049	0.000019
WELL ID	**DATE SAMPLED**	**METHOD**																						
MKTF-1 / HA1	03/11/15	8260B	**0.59**	0.1	<0.05	<0.05	<0.1	<0.2	<0.2	<0.5	<0.5	<0.05	0.066	**0.058**	<0.05	<0.05	<0.15	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	06/06/14	8260B	**1.1**	**0.27**	<0.05	<0.05	**0.3**	<0.2	<0.2	<0.5	<0.5	<0.05	0.094	<0.05	<0.05	<0.05	<0.15	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MKTF-2 / HA3	03/11/15	8260B	0.0051	<0.002	0.0045	<0.002	<0.004	<0.008	<0.008	<0.02	<0.02	0.0093	**0.05**	**0.031**	<0.002	<0.002	<0.006	<0.002	<0.002	0.0024	0.0023	<0.002	0.0024	<0.002
	11/14/14	8260B	0.0021	<0.001	**0.016**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.011	**0.075**	**0.078**	0.0016	<0.001	<0.003	0.0012	<0.001	<0.001	0.0036	0.0024	**0.0071**	**0.0097**
	09/18/14	8260B	**0.14**	<0.005	**0.0051**	<0.002	**0.017**	**0.037**	<0.02	<0.05	<0.05	0.03	**0.098**	**0.024**	0.03	<0.005	<0.015	0.13	0.0068	<0.005	<0.005	<0.005	<0.005	<0.005
	06/06/14	8260B	**0.031**	0.0019	**0.0081**	<0.002	**0.0049**	<0.004	<0.004	0.012	<0.01	0.011	**0.07**	**0.041**	0.0031	<0.001	<0.003	0.009	<0.001	<0.001	0.0035	0.0012	0.0041	0.001
	04/08/14	8260B	0.0035	<0.002	**0.0068**	<0.002	<0.004	<0.008	<0.008	<0.02	<0.02	0.0052	**0.041**	**0.034**	<0.002	<0.002	<0.006	<00.02	<0.002	<0.002	0.0022	<0.002	0.0034	<0.002
	10/28/13	8021B	**0.190**	0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MKTF-4 / SB03	06/04/15	8260B	**0.2700**	0.023	<0.01	<0.01	**0.22**	**0.14**	**0.086**	<0.1	<0.1	<0.01	<0.01	**0.022**	0.021	<0.01	<0.03	0.037	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	03/16/15	8260B	**0.2000**	0.024	<0.01	<0.01	**0.17**	**0.096**	**0.089**	<0.1	<0.1	<0.01	**0.019**	**0.032**	0.01	<0.1	<0.03	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/13/14	8260B	**0.2**	0.019	<0.01	<0.01	**0.13**	**0.095**	**0.08**	<0.1	<0.1	0.014	**0.037**	**0.059**	0.016	<0.1	<0.03	0.029	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/15/14	8260B	**0.096**	0.012	<0.005	<0.02	**0.092**	**0.041**	0.033	<0.05	<0.05	0.014	**0.037**	**0.074**	0.011	<0.005	<0.015	0.019	<0.005	<0.005	<0.005	<0.005	**0.0051**	<0.005
	06/04/14	8260B	**0.27**	0.049	<0.01	<0.02	**0.31**	**0.13**	**0.17**	<0.1	<0.1	<0.01	**0.011**	**0.021**	0.02	<0.01	<0.03	0.046	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	04/11/14	8260B	**0.51**	0.094	<0.02	<0.02	**0.43**	**0.18**	**0.28**	<0.2	<0.2	<0.02	**0.028**	<0.02	0.028	<0.02	<0.06	0.077	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SB07	10/28/13	8021B	**1**	**0.16**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB12	10/28/13	8021B	**0.87**	**0.26**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MKTF-9 / SB13	06/04/15	8260B	**0.033**	<0.005	<0.005	<0.005	**0.015**	**0.051**	<0.02	<0.05	<0.05	0.03	**0.028**	**0.055**	0.015	<0.005	<0.0015	0.022	<0.005	**0.0078**	**0.067**	<0.005	**0.0076**	<0.005
	03/16/15	8260B	**0.018**	<0.005	<0.005	**0.005**	**0.011**	**0.03**	<0.02	<0.05	<0.05	0.036	**0.034**	**0.074**	0.0074	<0.005	<0.0015	0.013	<0.005	**0.0071**	**0.13**	<0.005	**0.009**	<0.005
	11/14/14	8260B	**0.087**	<0.01	<0.01	<0.01	**0.043**	**0.11**	<0.04	<0.1	<0.1	0.024	**0.035**	**0.068**	0.014	<0.01	<0.03	0.03	<0.01	<0.01	**0.096**	<0.01	**0.011**	<0.01
	09/18/14	8260B	**0.038**	<0.01	<0.01	<0.005	**0.03**	**0.042**	<0.04	<0.1	<0.1	0.021	**0.028**	**0.065**	<0.01	<0.01	<0.03	0.014	<0.01	<0.01	**0.11**	<0.01	<0.01	<0.01
	06/05/14	8260B	**0.083**	<0.01	<0.1	<0.005	**0.068**	**0.089**	<0.04	<0.1	<0.1	0.014	**0.026**	**0.041**	0.017	<0.01	<0.03	0.033	<0.01	<0.01	**0.065**	<0.01	<0.01	<0.01
	04/14/14	8260B	**0.074**	<0.005	<0.005	<0.005	**0.044**	**0.062**	<0.02	<0.05	<0.05	0.012	0.024	**0.046**	0.013	<0.005	<0.015	0.026	<0.005	<0.005	**0.072**	<0.05	**0.0089**	<0.005
SB14	10/28/13	8021B	**0.59**	**0.15**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB15	10/28/13	8021B	**0.79**	**0.22**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MKTF-10 / SB16	06/04/15	8260B	**0.79**	**0.21**	<0.05	<0.05	**0.19**	<0.2	<0.2	<0.5	1.3	<0.05	**0.06**	<0.05	0.054	<0.05	<.15	0.13	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05
	03/16/15	8260B	**0.96**	**0.24**	<0.05	<0.05	**0.2**	<0.2	<0.2	<0.5	<0.5	<0.05	**0.078**	<0.05	0.051	<0.05	<.15	0.14	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05
	11/14/14	8260B	**1.5**	**0.57**	<0.02	<0.02	**0.36**	**0.24**	0.38	<0.2	<0.2	0.066	**0.039**	<0.02	0.12	0.034	0.084	0.36	0.04	<0.02	<0.02	<0.02	<0.2	<0.02
	09/18/14	8260B	**0.5**	0.11	<0.05	<0.05	**0.13**	<0.2	<0.2	<0.5	2.8	<0.05	**0.057**	<0.005	<0.05	<0.05	<0.15	0.068	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	06/06/14	8260B	**0.27**	0.065	<0.01	<0.05	**0.079**	<0.04	<0.04	0.21	1.8	0.033	**0.051**	<0.01	0.019	<0.01	<0.03	0.038	<0.01	<0.01	0.015	<0.01	<0.01	<0.01
	04/11/14	8260B	**0.96**	**0.21**	<0.05	<0.05	**0.2**	<0.2	<0.2	1.2	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MKTF-11 / SB17	06/04/15	8260B	**0.57**	**0.14**	<0.02	<0.02	**0.11**	<0.08	<0.08	<0.2	0.43	<0.02	**0.031**	<0.02	0.036	<0.02	<0.06	0.099	<0.02	<0.02	<0.02	<0.02	<0.02	**0.034**
	03/16/15	8260B	**0.51**	0.11	<0.02	<0.02	**0.093**	<0.08	<0.08	<0.2	<0.2	<0.02	**0.048**	<0.02	0.033	<0.02	<0.06	0.094	<0.02	<0.02	<0.02	<0.02	<0.02	**0.045**
	11/13/14	8260B	**0.4**	0.06	<0.02	<0.02	**0.058**	<0.08	<0.08	<0.2	<0.2	<0.2	**0.047**	<0.02	0.029	<0.02	<0.06	0.078	<0.02	<0.02	<0.02	<0.02	<0.02	**0.054**
	09/15/14	8260B	**0.36**	0.058	<0.05	<0.02	<0.1	<0.2	<0.2	<0.5	<0.5	<0.5	**0.057**	<0.05	<0.05	<0.05	<0.15	0.069	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	06/05/14	8260B	**0.27**	0.052	<0.005	<0.02	**0.066**	<0.02	<0.02	0.29	0.17	0.016	**0.053**	<0.005	0.029	<0.005	<0.015	0.068	0.0078	<0.005	0.014	<0.005	<0.005	**0.018**
	04/11/14	8260B	**0.41**	0.062	<0.05	<0.05	<0.1	<0.2	<0.2	<0.5	<0.5	<0.05	**0.065**	<0.05	<0.05	<0.05	<0.15	0.097	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MKTF-15 / SB31	09/17/14	8260B	**0.66**	**0.18**	<0.05	<0.05	**0.12**	<0.2	<0.2	<0.5	<0.5	<0.05	<0.05	<0.05	0.068	<0.05	<0.15	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	06/05/14	8260B	**0.33**	0.095	<0.005	<0.005	**0.08**	**0.03**	0.035	0.29	0.062	<0.005	<0.005	<0.005	0.059	0.0059	<0.015	0.097	0.012	<0.005	<0.005	<0.005	<0.005	<0.005
	04/10/14	8260B	**0.46**	0.11	<0.01	<0.01	**0.072**	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01	0.053	<0.01	<0.03	0.094	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-16 / SB32	03/16/15	8260B	**0.94**	**0.31**	<0.05	<0.05	**0.2**	<0.2	<0.2	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	11/18/14	8260B	**1**	**0.36**	<0.05	<0.05	**0.16**	<0.2	<0.2	<0.5	<0.5	<0.05	**0.081**	<0.05	<0.05	<0.05	<0.15	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	09/17/14	8260B	**1.1**	**0.36**	<0.05	<0.05	**0.26**	<0.2	<0.2	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	0.12	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05
	06/05/14	8260B	**1.2**	**0.36**	<0.05	<0.05	**0.24**	<0.2	<0.2	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	04/10/14	8260B	**0.49**	0.12	<0.02	<0.02	**0.07**	<0.08	<0.08	<0.2	<0.2	<0.02	<0.02	<0.02	0.053	<0.02	<0.06	0.099	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
MKTF-17 / SB33	03/12/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.0012	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/18/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	0.0091	0.003	<0.003	0.013	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001
	09/18/14	8260B	<0.01	<0.01	<0.01	<0.01	<0.02	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01	0.029	<0.01	<0.03	0.066	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	04/09/14	8260B	**0.074**	<0.01	<0.01	<0.01	**0.032**	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01	0.037	<0.01	<0.03	0.096	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-18 / SB34	03/17/15	8260B	**0.065**	0.019	<0.005	<0.005	**0.036**	**0.088**	0.025	<0.05	<0.05	0.0056	<0.005	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/18/14	8260B	**0.096**	0.023	<0.005	<0.005	**0.088**	**0.2**	**0.082**	<0.05	<0.05	0.0056	<0.005	<0.005	0.0088	<0.015	<0.015	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	09/18/14	8260B	**0.095**	0.025	<0.005	<0.001	**0.097**	**0.15**	0.033	<0.05	<0.05	0.0073	<0.005	<0.005	0.0078	<0.005	<0.015	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	06/06/14	8260B	**0.088**	0.029	<0.005	<0.001	**0.068**	**0.13**	0.028	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.015	0.0066	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	04/14/14	8260B	**0.091**	0.024	<0.005	<0.005	**0.077**	**0.13**	**0.043**	<0.05	<0.05	<0.005	<0.005	<0.005	0.0052	<0.005	<0.015	0.0076	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	1,2-Dichloro ethane (EDC) (mg/L)	1,2-Dibromoethane (EDB)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	*(Methyl ethyl ketone)* 2-Butanone (mg/L)	cis-1,2-DCE (mg/L)	1,1-Dichloro ethane (mg/L)	1,1-Dichloro ethene (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)	Tetrachloro ethene (PCE) (mg/L)	1,1,1-Trichloro ethane (mg/L)	1,1,2-Trichloro ethane (mg/L)	Trichloro ethene (TCE) (mg/L)	Vinyl Chloride (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.01	0.0001	NE	NE	NE	NE	NE	NE	**0.025**	**0.005**	NE	NE	NE	NE	NE	0.02	**0.06**	0.01	0.1	**0.001**
40 CFR 141.62 MCL (April 2014)			NE	NE	**0.005**	**0.00005**	NE	NE	NE	NE	NE	**0.07**	NE	0.007	NE	NE	NE	NE	NE	**0.005**	0.2	**0.005**	**0.005**	0.002
NMED Tap Water (December 2014)			NE	NE	0.00171	0.0000746	**0.00165**	NE	NE	**14.1**	**5.56**	0.00365	0.0275	0.284	NE	NE	NE	NE	NE	0.0403	8	0.000415	0.00282	0.000201
EPA RSL for Tap Water (November 2014)			**0.015**	**0.12**	0.00017	0.0000075	0.00017	**0.0011**	**0.036**	14	5.6	0.036	0.0027	0.28	NE	NE	**1**	**0.66**	**2**	0.011	8	0.00028	0.00049	0.000019
WELL ID	**DATE SAMPLED**	**METHOD**																						
MKTF-19 / SB35	03/12/15	8260B	**0.39**	0.047	<0.01	<0.01	**0.38**	**0.17**	**0.25**	<0.1	<0.1	<0.01	<0.01	<0.01	0.0180	<0.01	<0.03	0.0370	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/18/14	8260B	**0.83**	0.11	<0.05	<0.05	**0.58**	**0.41**	**0.54**	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	09/24/14	8260B	**0.69**	0.11	<0.05	<0.05	**0.5**	**0.22**	**0.36**	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.1	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	04/09/14	8260B	**0.59**	0.099	<0.05	<0.05	**0.43**	<0.2	**0.3**	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	0.086	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MKTF-20	03/16/15	8260B	**1.3**	**0.39**	<0.05	<0.05	**0.21**	<0.2	<0.2	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	11/18/14	8260B	**1.8**	**0.53**	<0.5	<0.05	**0.16**	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.15	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	04/11/14	8260B	**1.9**	**0.5**	<0.05	<0.05	**3.0**	<0.2	<0.2	<0.5	<0.05	<0.05	<0.05	<0.05	0.076	<0.05	<0.15	0.26	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MKTF-21	03/16/15	8260B	**0.11**	0.051	<0.01	<0.01	<0.02	<0.04	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	04/11/14	8260B	**2.2**	**0.6**	<0.05	<0.05	**0.49**	<0.2	<0.2	<0.5	<0.5	<0.5	<0.05	<0.05	0.1	<0.05	<0.15	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MKTF-22 / SB23	03/12/15	8260B	**0.058**	<0.02	<0.02	<0.02	<0.04	**0.099**	<0.08	<0.2	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.06	0.031	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	11/17/14	8260B	<0.01	<0.01	<0.01	<0.01	<0.02	**0.058**	<0.04	<0.1	<0.1	0.01	0.015	<0.01	<0.01	<0.01	<0.03	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	04/10/14	8260B	**0.089**	<0.01	<0.01	<0.01	<0.02	**0.048**	<0.04	<0.1	<0.1	<0.01	<0.01	<0.01	0.015	<0.01	<0.03	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-23 / SB25	03/12/15	8260B	**1.4**	**0.38**	<0.01	<0.01	**0.3**	**0.097**	**0.14**	<0.1	<0.1	0.055	**0.12**	**0.053**	0.044	<0.01	<0.03	0.093	<0.01	<0.01	0.049	<0.01	<0.01	<0.01
	11/17/14	8260B	**0.89**	**0.22**	<0.01	<0.01	**0.15**	**0.074**	**0.11**	<0.1	<0.1	0.043	**0.15**	**0.064**	0.034	<0.01	<0.03	0.066	<0.01	<0.01	0.024	<0.01	<0.01	**0.022**
	09/23/14	8260B	**0.54**	**0.15**	<0.01	<0.01	**0.1**	<0.04	**0.041**	<0.1	<0.1	0.029	**0.092**	**0.047**	0.026	<0.01	<0.03	0.058	<0.01	<0.01	0.024	<0.01	<0.01	<0.01
MKTF-24 / SB26	03/11/15	8260B	<0.005	<0.005	**0.007**	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.035	**0.1**	**0.051**	0.016	<0.005	<0.015	0.024	<0.005	<0.005	0.01	<0.005	<0.005	<0.005
	11/14/14	8260B	0.0027	<0.001	**0.0096**	<0.001	<0.002	**0.0046**	<0.004	<0.01	<0.01	0.039	**0.15**	**0.058**	0.018	<0.001	0.0058	0.028	0.004	<0.001	0.0046	0.0011	0.0049	**0.014**
	09/24/14	8260B	0.0023	<0.002	**0.0098**	<0.001	<0.004	<0.008	<0.008	<0.02	<0.02	0.044	**0.14**	**0.067**	0.024	<0.002	0.0087	0.039	0.0065	<0.002	<0.002	<0.002	0.005	<0.003
	04/08/14	8260B	<0.001	<0.001	**0.014**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.057	**0.2**	**0.088**	0.02	<0.001	0.0091	0.038	0.005	0.0019	0.021	0.0014	**0.0052**	<0.001
MKTF-25 / SB8	03/11/15	8260B	0.0086	0.005	**0.012**	<0.005	**0.018**	<0.02	<0.02	<0.05	<0.05	0.055	**0.28**	**0.14**	0.037	<0.005	0.0160	0.051	0.0073	<0.005	0.053	<0.005	**0.031**	<0.005
	11/14/14	8260B	<0.005	0.005	0.012	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.044	**0.23**	**0.098**	0.04	<0.005	<0.015	0.037	0.0066	<0.005	0.023	<0.005	**0.027**	**0.046**
	09/23/14	8260B	<0.01	<0.01	<0.01	<0.002	<0.02	<0.04	<0.04	<0.1	<0.1	0.046	**0.25**	**0.1**	0.038	<0.01	<0.03	0.041	<0.01	<0.01	0.03	<0.01	**0.024**	<0.01
	04/08/14	8260B	0.010	0.003	**0.01**	<0.002	**0.03**	<0.008	<0.008	<0.02	<0.02	0.054	**0.33**	**0.15**	0.034	<0.002	0.014	0.039	0.0058	0.0033	**0.076**	<0.002	**0.03**	<0.002
MKTF-26 / SB29	03/11/15	8260B	<0.005	<0.005	<0.005	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.008	**0.049**	**0.009**	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	11/14/14	8260B	<0.005	<0.005	**0.0093**	<0.005	<0.01	<0.02	<0.02	<0.05	<0.05	0.011	**0.083**	**0.043**	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.017**
	09/24/14	8260B	<0.001	<0.001	**0.0081**	<0.005	<0.002	<0.004	<0.004	<0.01	<0.01	0.013	**0.084**	**0.032**	0.0073	<0.001	<0.003	0.005	0.0013	<0.001	0.0025	0.0011	0.0017	<0.001
	04/08/14	8260B	<0.001	<0.001	**0.013**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0045	**0.083**	**0.066**	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0017	0.0014	0.0029	<0.001
MKTF-27 / SB30	03/11/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	0.0016	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/14/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	0.0028	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.002	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	0.002	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	04/08/14	8260B	<0.002	<0.002	<0.002	<0.002	<0.004	<0.008	<0.008	<0.02	<0.02	<0.002	<0.002	<0.002	<0.002	<0.001	<0.006	<0.002	<0.002	<0.001	<0.002	<0.002	<0.002	<0.001
MKTF-28	03/11/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/14/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MKTF-29	03/11/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	04/09/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001
MKTF-30	03/11/15	8260B	<0.001	<0.001	0.004	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0045	**0.081**	0.004	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0019	<0.001	0.0036	<0.001
	11/17/14	8260B	<0.001	<0.001	**0.0053**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0039	**0.087**	0.0027	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.003	0.0011	0.0044	**0.0048**
	09/24/14	8260B	<0.001	<0.001	0.0044	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0042	**0.068**	0.0035	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0025	0.0011	0.004	<0.001
	04/09/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.01	**0.025**	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001
MKTF-31	03/11/15	8260B	<0.001	<0.001	**0.014**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0016	**0.021**	**0.04**	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0039	0.0015	0.0025	<0.001
	11/17/14	8260B	<0.001	<0.001	**0.016**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0018	**0.029**	**0.034**	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0039	0.0016	0.0024	**0.0019**
	09/23/14	8260B	<0.001	<0.001	**0.013**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0018	0.022	**0.041**	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0037	0.0016	0.0024	<0.001
	04/08/14	8260B	<0.001	<0.001	**0.021**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0016	**0.028**	**0.059**	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0058	0.0018	0.003	<0.001
MKTF-32	03/12/15	8260B	<0.001	<0.001	**0.025**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0013	**0.019**	**0.048**	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	0.0011	0.0017	<0.001	<0.001
	11/17/14	8260B	<0.001	<0.001	**0.028**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	0.0012	0.024	**0.041**	0.0011	<0.001	<0.003	<0.001	<0.001	<0.001	0.0011	0.0025	<0.001	**0.002**
	09/23/14	8260B	<0.005	<0.005	**0.029**	<0.001	<0.01	<0.02	<0.02	<0.05	<0.05	<0.005	0.023	**0.054**	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	04/09/14	8260B	<0.001	<0.001	**0.03**	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	**0.022**	**0.036**	0.0025	<0.001	<0.003	<0.001	<0.001	<0.001	0.0015	0.0023	<0.001	<0.001
MKTF-33	03/12/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/17/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	09/23/14	8260B	<0.005	<0.005	<0.005	<0.001	<0.01	<0.02	<0.02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	04/10/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	1,2-Dichloro ethane (EDC) (mg/L)	1,2-Dibromoetha ne (EDB)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	*(Methyl ethyl ketone)* 2-Butanone (mg/L)	cis-1,2-DCE (mg/L)	1,1-Dichloro ethane (mg/L)	1,1-Dichloro ethene (mg/L)	Isopropyl benzene (mg/L)	4-Isopropyl toluene (mg/L)	n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	sec-Butyl benzene (mg/L)	Tetrachloro ethene (PCE) (mg/L)	1,1,1-Trichloro ethane (mg/L)	1,1,2-Trichloro ethane (mg/L)	Trichloro ethene (TCE) (mg/L)	Vinyl Chloride (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	0.01	0.0001	NE	NE	NE	NE	NE	NE	**0.025**	**0.005**	NE	NE	NE	NE	NE	0.02	**0.06**	0.01	0.1	**0.001**
40 CFR 141.62 MCL (April 2014)			NE	NE	**0.005**	**0.00005**	NE	NE	NE	NE	NE	**0.07**	NE	0.007	NE	NE	NE	NE	NE	**0.005**	0.2	**0.005**	**0.005**	0.002
NMED Tap Water (December 2014)			NE	NE	0.00171	0.0000746	**0.00165**	NE	NE	**14.1**	**5.56**	0.00365	0.0275	0.284	NE	NE	NE	NE	NE	0.0403	8	0.000415	0.00282	0.000201
EPA RSL for Tap Water (November 2014)			**0.015**	**0.12**	0.00017	0.0000075	0.00017	**0.0011**	**0.036**	14	5.6	0.036	0.0027	0.28	NE	NE	**1**	**0.66**	**2**	0.011	8	0.00028	0.00049	0.000019
WELL ID	**DATE SAMPLED**	**METHOD**																						
MKTF-34	03/12/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0012	<0.001
	11/17/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	0.0015	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001
	09/24/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	0.0011	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0022	<0.001
	04/09/14	8260B	<0.002	<0.002	<0.002	<0.002	<0.004	<0.008	<0.008	<0.02	<0.02	<0.002	<0.002	0.0028	<0.002	<0.001	<0.006	<0.002	<0.002	<0.002	<0.002	<0.002	0.0029	<0.002
MKTF-35	06/04/15	8260B	0.0095	0.0023	<0.001	<0.001	**0.0039**	**0.0042**	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	0.0084	<0.001	<0.003	0.022	0.0017	<0.001	<0.001	<0.001	<0.001	<0.001
	03/17/15	8260B	**0.034**	0.046	<0.01	<0.01	**0.036**	**0.0077**	0.0063	<0.01	<0.01	<0.001	<0.001	<0.001	0.0082	<0.001	<0.003	0.035	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001
	11/21/14	8260B	**0.12**	0.05	**0.04**	<0.001	**0.04**	**0.038**	**0.059**	<0.01	<0.01	<0.001	<0.001	0.0011	0.0051	<0.001	0.0061	0.028	0.0027	<0.001	<0.001	<0.001	<0.001	<0.001
MKTF-36	06/04/15	8260B	**0.065**	<0.02	<0.02	<0.02	**0.58**	**0.34**	**0.58**	<0.2	<0.2	<0.02	<0.02	<0.02	0.044	<0.02	<0.06	0.091	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	03/17/15	8260B	**0.031**	<0.01	<0.01	<0.01	**0.43**	**0.26**	**0.51**	<0.1	<0.1	<0.01	<0.01	<0.01	0.03	<0.01	<0.03	0.081	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/21/14	8260B	**0.27**	0.062	**0.59**	<0.01	**0.59**	**0.34**	**0.53**	<0.1	<0.1	<0.1	<0.1	<0.1	0.041	<0.1	<0.03	0.099	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-37	06/04/15	8260B	**0.95**	**0.33**	**0.011**	<0.01	**0.72**	**0.15**	**0.27**	<0.1	<0.1	<0.01	0.015	**0.1**	0.15	0.021	0.14	0.19	0.045	<0.01	0.019	<0.01	**0.17**	<0.01
	03/17/15	8260B	**0.24**	0.11	**0.0091**	<0.001	**0.088**	**0.03**	**0.038**	<0.01	<0.01	<0.001	0.018	**0.081**	0.047	0.0045	0.02	0.056	0.0073	<0.001	0.0087	0.0022	**0.12**	<0.001
	11/21/14	8260B	**0.51**	**0.14**	**0.017**	**0.0015**	**0.35**	**0.047**	**0.084**	<0.01	<0.01	<0.001	**0.034**	**0.21**	0.078	0.0048	0.026	0.082	0.011	<0.001	<0.001	0.0017	**0.3**	<0.001
MKTF-38	03/16/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.001
	11/21/14	8260B	0.0046	0.0015	<0.001	<0.001	**0.0055**	**0.0088**	0.0098	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.0014	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.001
MKTF-39	03/16/15	8260B	**0.064**	<0.002	<0.002	<0.002	**0.044**	**0.091**	0.013	<0.02	<0.02	<0.002	<0.002	<0.002	0.011	0.0052	<0.006	0.014	0.0057	<0.002	<0.002	<0.002	<0.002	<0.002
	11/18/14	8260B	**0.043**	<0.005	<0.005	<0.005	**0.12**	**0.17**	**0.13**	<0.05	<0.05	<0.005	<0.005	<0.005	0.015	<0.005	<0.015	0.019	0.0055	<0.005	<0.005	<0.005	<0.005	<0.005
MKTF-40	03/11/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	0.0011	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/21/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	0.0011	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MKTF-41	03/12/15	8260B	<0.001	<0.001	0.0013	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	0.0018	0.0016	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/18/14	8260B	<0.001	<0.001	0.002	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	0.0036	0.0038	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MKTF-42	03/11/15	8260B	0.0039	0.0026	<0.001	<0.001	**0.014**	**0.0075**	0.0061	0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/18/14	8260B	**0.027**	<0.01	<0.01	<0.01	**0.035**	**0.073**	**0.058**	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-43	03/11/15	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	0.0011	<0.001	0.0036	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/18/14	8260B	<0.001	<0.001	<0.001	<0.001	<0.002	<0.004	<0.004	<0.01	<0.01	<0.001	<0.001	0.0011	<0.001	0.0036	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MKTF-44	03/12/15	8260B	<0.002	<0.002	<0.002	<0.002	<0.004	<0.008	<0.008	<0.02	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
	11/21/14	8260B	<0.002	<0.002	<0.002	<0.002	<0.004	<0.008	<0.008	<0.02	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SB24	4/3/2014	8260B	0.014	0.0062	**0.0094**	<0.001	**0.0074**	<0.004	<0.004	<0.01	<0.01	<0.001	0.007	0.0043	0.0027	<0.001	<0.003	0.0027	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
SB27	4/3/2014	8260B	**1.1**	**0.3**	**0.012**	<0.01	**0.3**	<0.04	**0.065**	<0.1	<0.1	**0.081**	**0.35**	**0.22**	0.046	<0.01	<0.03	0.18	0.012	<0.01	**0.17**	<0.01	**0.037**	<0.01

DEFINITIONS
NE = Not established
NA = Not analyzed
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
40 CFR Part 141 National Primary Driking Water Regulations - Maximum Contaminant Levels (MCLs)
New Mexico Environment Department Tap Water Screening Levels December 2014
EPA Regional Screening Level (RSL) Tap Water Screening Levels November 2014
Applicable screening levels per Gallup's RCRA Permit Section IV.D.1 bolded

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Acenaphthene (mg/L)	Aniline (mg/L)	Benz (a)anthracene (mg/L)	Benzoic Acid (mg/L)	Bis(2-ethylhexyl) phthalate (mg/L)	Carbazole (mg/L)	2,4-Dimethylphenol (mg/L)	Fluorene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	3+4-Methylphenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (April 2014)			NE	NE	NE	NE	**0.006**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NMED Tap Water (December 2014)			**0.535**	NE	**0.000343**	NE	0.0556	NE	**0.354**	**0.288**	NE	NE	NE	NE	**0.00165**	**0.17**	**0.576**
EPA RSL for Tap Water (November 2014)			0.53	**0.013**	0.00034	**75.0**	0.0056	NE	0.36	0.29	**0.0011**	**0.036**	**0.93**	**0.93**	0.00017	NE	5.8
WELL ID	**DATE SAMPLED**	**METHOD**															
MKTF-1 / HA1	03/11/15	8270C	<0.01	**0.018**	<0.01	<0.02	<0.01	<0.01	0.051	<0.01	**0.12**	<0.01	0.061	0.035	**0.09**	<0.01	0.023
	06/06/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.05	0.02	**0.12**	**0.31**	0.06	0.031	**0.31**	0.028	0.019
MKTF-2 / HA3	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/18/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.023**	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	06/06/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	04/08/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-4 / SB03	06/04/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	0.015	<0.01	<0.01	**0.12**	**0.076**	<0.01	<0.01	**0.19**	<0.01	<0.01
	03/16/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	0.014	<0.01	<0.01	**0.051**	0.025	<0.01	<0.01	**0.059**	<0.01	<0.01
	11/13/14	8270C	<0.01	<0.01	<0.01	0.021	<0.01	0.017	<0.01	<0.01	**0.061**	**0.047**	<0.01	<0.01	**0.08**	<0.01	<0.01
	09/24/14[1]	8270C	<0.01	<0.01	<0.01	0.021	<0.01	<0.01	<0.01	<0.01	**0.13**	**0.16**	<0.02	<0.01	**0.19**	<0.01	<0.01
	06/06/14	8270C	<0.01	<0.01	<0.01	0.021	<0.01	0.011	<0.01	<0.01	**0.11**	**0.14**	<0.02	<0.01	**0.24**	<0.01	<0.01
	04/11/14	8270C	<0.01	<0.01	<0.01	0.021	<0.01	0.017	<0.01	<0.01	**0.12**	**0.16**	<0.02	<0.01	**0.23**	<0.01	<0.01
MKTF-9 / SB13	06/04/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.036**	<0.01	<0.01	<0.01	**0.012**	<0.01	<0.01
	03/16/15	8270C	<0.01	<0.01	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	**0.049**	<0.01	<0.01	<0.01	**0.021**	<0.01	<0.01
	11/14/14	8270C	<0.01	<0.01	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	**0.027**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/18/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	0.01	<0.01	<0.01	**0.031**	<0.01	<0.02	<0.01	**0.018**	<0.01	<0.01
	06/05/14	8270C	<0.01	<0.01	<0.01	0.021	<0.01	0.01	<0.01	<0.01	**0.058**	0.014	<0.02	<0.01	**0.041**	<0.01	<0.01
	04/14/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.046**	0.01	<0.02	<0.01	**0.031**	<0.01	<0.01
MKTF-10 / SB16	06/04/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.1	<0.01	**0.066**	**0.084**	0.35	0.54	**0.18**	<0.01	0.28
	03/16/15	8270C	<0.01	**0.067**	<0.01	<0.02	**0.01**	<0.01	0.11	<0.01	<0.01	**0.088**	0.53	0.63	**0.17**	<0.01	0.42
	11/14/14	8270C	<0.01	**0.054**	<0.01	<0.02	**0.01**	<0.01	0.063	<0.01	**0.046**	**0.051**	0.33	0.4	**0.099**	<0.01	0.29
	09/18/14	8270C	<0.01	**0.073**	<0.01	<0.02	<0.01	<0.01	0.09	<0.01	**0.036**	**0.042**	0.32	0.38	**0.098**	<0.01	0.25
	06/06/14	8270C	<0.01	**0.075**	<0.01	<0.01	<0.01	<0.01	0.11	<0.01	**0.04**	**0.053**	0.49	0.61	**0.14**	<0.01	0.37
	04/11/14	8270C	<0.012	**0.075**	<0.012	<0.023	<0.012	<0.012	0.12	<0.012	**0.042**	**0.056**	0.3	0.26	**0.14**	<0.012	0.061
MKTF-11 / SB17	06/04/15	8270C	<0.01	**0.046**	<0.01	<0.02	<0.01	<0.01	0.14	<0.01	**0.02**	0.021	0.3	0.23	**0.07**	<0.01	0.053
	03/16/15	8270C	<0.01	**0.044**	<0.01	<0.02	<0.01	<0.01	0.11	<0.01	**0.025**	0.02	0.27	0.24	**0.069**	<0.01	0.052
	11/13/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.014**	<0.01	0.012	<0.01	**0.015**	<0.01	0.07	0.046	**0.031**	<0.01	0.02
	09/24/14	8270C	<0.01	**0.027**	<0.1	<0.01	<0.10	<0.1	0.19	<0.01	**0.024**	0.022	0.35	0.24	**0.067**	<0.01	0.078
	06/05/14	8270C	<0.01	**0.025**	<0.01	<0.01	<0.01	<0.01	0.092	<0.01	**0.011**	<0.01	0.18	0.13	**0.046**	<0.01	0.032
	04/11/14	8270C	<0.01	**0.023**	<0.01	<0.02	<0.01	<0.01	0.078	<0.01	**0.012**	<0.01	0.16	0.11	**0.038**	<0.01	0.021
MKTF-15 / SB31	09/17/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.013	<0.01	**0.035**	0.033	0.024	<0.01	**0.048**	<0.01	<0.01
	06/05/14	8270C	<0.01	<0.01	<0.01	0.023	<0.01	<0.01	0.013	<0.01	**0.021**	0.021	0.028	<0.01	**0.05**	<0.01	<0.01
	04/10/14	8270C	<0.012	<0.012	<0.012	<0.025	<0.012	<0.012	0.016	<0.012	**0.02**	0.021	0.043	<0.012	**0.048**	<0.012	0.015
MKTF-16 / SB32	03/16/15	8270C	<0.01	**0.02**	<0.01	<0.02	<0.01	<0.01	0.19	<0.01	**0.045**	**0.053**	0.15	<0.01	**0.15**	<0.01	0.031
	11/18/14	8270C	<0.01	**0.018**	<0.01	<0.02	**0.014**	<0.01	0.08	<0.01	**0.047**	**0.051**	0.14	0.016	**0.13**	<0.01	0.038
	09/17/14	8270C	<0.01	**0.024**	<0.01	<0.02	<0.01	<0.01	0.18	<0.01	**0.053**	**0.062**	0.15	0.03	**0.18**	<0.01	0.031
	06/16/14	8270C	<0.01	0.011	<0.01	<0.02	<0.01	<0.01	0.17	<0.01	**0.037**	**0.042**	0.22	0.16	**0.14**	<0.01	0.42
	04/10/14	8270C	<0.01	**0.015**	<0.01	<0.02	<0.01	<0.01	0.2	<0.01	**0.035**	**0.044**	0.16	0.091	**0.13**	<0.01	0.09
MKTF-17 / SB33	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/18/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	06/16/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	0.039
MKTF-18 / SB34	04/09/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	**0.024**	<0.01	<0.01
	03/17/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	**0.1**	0.028	<0.01	<0.01	**0.032**	<0.01	<0.01
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.012**	<0.01	<0.02	<0.01	**0.11**	0.036	<0.01	<0.01	**0.055**	<0.01	<0.01
	09/18/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.12**	0.023	<0.02	<0.01	**0.059**	<0.01	<0.01
	06/06/14	8270C	<0.014	<0.014	<0.014	<0.029	<0.014	<0.014	<0.014	<0.014	**0.064**	<0.014	<0.029	<0.014	**0.026**	<0.014	<0.014
MKTF-19 / SB35	04/14/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.11**	0.035	<0.02	<0.01	**0.061**	<0.01	<0.01
	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.17**	**0.27**	<0.01	<0.01	**0.34**	<0.01	0.015
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	**0.11**	0.033	<0.01	<0.01	**0.054**	<0.01	<0.01
	04/09/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.16**	**0.25**	<0.02	<0.01	**0.32**	<0.01	0.012

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Acenaphthene (mg/L)	Aniline (mg/L)	Benz (a)anthracene (mg/L)	Benzoic Acid (mg/L)	Bis(2-ethylhexyl) phthalate (mg/L)	Carbazole (mg/L)	2,4-Dimethylphenol (mg/L)	Fluorene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	3+4-Methylphenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (April 2014)			NE	NE	NE	NE	**0.006**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NMED Tap Water (December 2014)			**0.535**	NE	**0.000343**	NE	0.0556	NE	**0.354**	**0.288**	NE	NE	NE	NE	**0.00165**	**0.17**	**0.576**
EPA RSL for Tap Water (November 2014)			0.53	**0.013**	0.00034	**75.0**	0.0056	NE	0.36	0.29	**0.0011**	**0.036**	**0.93**	**0.93**	0.00017	NE	5.8
WELL ID	**DATE SAMPLED**	**METHOD**															
MKTF-20	03/16/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.32	<0.01	**0.045**	**0.037**	0.21	0.36	**0.13**	<0.01	0.21
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.014**	<0.01	**0.61**	<0.01	**0.11**	**0.066**	0.12	0.051	**0.1**	<0.01	0.037
	04/11/14	8270C	<0.013	**0.022**	<0.013	<0.026	<0.013	<0.013	0.13	<0.013	**0.088**	**0.12**	0.12	0.076	**0.25**	<0.013	<0.013
MKTF-21	03/16/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.069	<0.01	<0.01	0.038
	04/11/14	8270C	<0.012	<0.012	<0.012	<0.025	<0.012	<0.012	0.1	<0.012	**0.069**	**0.11**	0.14	0.1	**0.27**	<0.012	0.013
MKTF-22 / SB23	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.066**	<0.01	<0.01	<0.01	**0.016**	<0.01	0.014
	11/17/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.013**	<0.01	<0.01	<0.01	**0.045**	<0.01	<0.01	<0.01	<0.01	<0.01	0.037
	04/10/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	**0.045**	<0.01	<0.02	<0.01	**0.013**	<0.01	<0.01
MKTF-23 / SB25	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.094	<0.01	**0.079**	**0.082**	0.042	0.063	**0.15**	<0.01	0.021
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.014**	<0.01	0.031	<0.01	**0.084**	**0.095**	0.058	0.053	**0.13**	<0.01	0.037
	09/23/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.027	<0.01	**0.075**	**0.079**	0.034	0.025	**0.13**	<0.01	0.022
MKTF-24 / SB26	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/08/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-25 / SB8	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.017**	<0.01	<0.01
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/23/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/08/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	**0.021**	<0.01	0.013
MKTF-26 / SB29	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	0.014
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/08/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-27 / SB30	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/08/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-28	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/14/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-29	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	01/09/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-30	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/17/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.011**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/09/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-31	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	**0.013**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/17/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.013**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MKTF-32	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/17/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.012**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/23/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/09/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-33	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/17/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.012**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/23/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/10/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-34	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11/17/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.014**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	09/24/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	04/09/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01

Table 2
Chemical Analyses
Western Refining Southwest, Inc. - Gallup Refinery

			Acenaphthene (mg/L)	Aniline (mg/L)	Benz (a)anthracene (mg/L)	Benzoic Acid (mg/L)	Bis(2-ethylhexyl) phthalate (mg/L)	Carbazole (mg/L)	2,4-Dimethylphenol (mg/L)	Fluorene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	2-Methyl phenol (mg/L)	3+4-Methylphenol (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	Phenol (mg/L)
WQCC 20NMAC 6.2.3103			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
40 CFR 141.62 MCL (April 2014)			NE	NE	NE	NE	**0.006**	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NMED Tap Water (December 2014)			**0.535**	NE	**0.000343**	NE	0.0556	NE	**0.354**	**0.288**	NE	NE	NE	NE	**0.00165**	**0.17**	**0.576**
EPA RSL for Tap Water (November 2014)			0.53	**0.013**	0.00034	**75.0**	0.0056	NE	0.36	0.29	**0.0011**	**0.036**	**0.93**	**0.93**	0.00017	NE	5.8
WELL ID	**DATE SAMPLED**	**METHOD**															
MKTF-35	06/04/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	03/17/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.028**	<0.01	<0.01
	11/21/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.034**	**0.045**	<0.01	<0.01	**0.036**	<0.01	<0.01
MKTF-36	06/04/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	0.013	**0.33**	**0.51**	<0.01	<0.01	**0.49**	<0.01	0.056
	03/17/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	0.01	**0.24**	**0.39**	<0.01	<0.01	**0.47**	<0.01	0.015
	11/21/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.16**	**0.23**	<0.01	<0.01	**0.28**	<0.01	0.044
MKTF-37	06/04/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.074**	**0.11**	0.028	<0.01	**0.23**	<0.01	<0.01
	03/17/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.072**	**0.096**	0.033	<0.01	**0.16**	<0.01	<0.01
	11/21/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	**0.05**	**0.056**	<0.01	<0.01	**0.27**	<0.01	<0.01
MKTF-38	03/16/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/21/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-39	03/16/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.069	<0.01	<0.01	0.038
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.012**	0.021	<0.01	<0.01	**0.079**	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-40	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/21/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-41	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.014**	<0.01	<0.01	<0.01	**0.072**	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-42	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	**0.013**	<0.01	<0.01	<0.01	**0.072**	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-43	03/11/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/18/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
MKTF-44	03/12/15	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
	11/21/14	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
SB24	4/3/2014	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
SB27	4/3/2014	8270C	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01

DEFINITIONS
NE = Not established
NA = Not analyzed
Bold and highlighted values represent values above the applicable standards

STANDARDS
WQCC 20 NMAC 6.2.3103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
40 CFR Part 141 National Primary Driking Water Regulations - Maximum Contaminant Levels (MCLs)
New Mexico Environment Department Tap Water Screening Levels December 2014
EPA Regional Screening Level (RSL) Tap Water Screening Levels November 2014
Applicable screening levels per Gallup's RCRA Permit Section IV.D.1 bolded

Table 3
Temporary Sump Recovery Volumes
Hydrocarbon Seep Area
Western Refining Southwest, Inc., Gallup Refinery

Date	Hydrocarbon Recovered (gallons)	Water Pumped (gallons)	Total Fluid Pumped (gallons)
6/26/2013 - 8/13/2013	?	?	27,000
9/3/2013 [1]	682	3818	4500
9/3/2013 [1]	367	4133	4500
9/4/2013	62	3938	4000
9/6/2013	62	3938	4000
9/9/2013	30	4470	4500
9/11/2013	30	4470	4500
9/13/2013	62	3938	4000
9/16/2013	135	5140	5275
9/18/2013	125	4111	4236
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	4049	4112
11/12/2013	205	5275	5480
11/14/2013	78	5168	5246
11/18/2013	60	4539	4599
11/26/2013	80	5168	5248
12/3/2013	54	5169	5223
12/6/2013	57	4890	4947
12/12/2013	54	5169	5223
12/17/2013	58	4775	4833
12/24/2013	57	4890	4947
1/2/2014	88	4687	4775
1/6/2014	56	4947	5003
1/7/2014	32	3829	3861
1/9/2014	32	3448	3480
1/13/2014	29	4688	4717
1/16/2014	29	4688	4717
1/22/2014	29	4918	4947
1/29/2014	30	4449	4479
1/31/2014	61	4236	4297
2/4/2014	61	4236	4297
2/11/2014	60	4539	4599
2/18/2014	57	4890	4947

Table 3
Temporary Sump Recovery Volumes
Hydrocarbon Seep Area
Western Refining Southwest, Inc., Gallup Refinery

Date	Hydrocarbon Recovered (gallons)	Water Pumped (gallons)	Total Fluid Pumped (gallons)
2/25/2014	57	4890	4947
2/28/2014	63	3924	3987
3/4/2014	31	4327	4358
3/7/2014	29	4804	4833
3/12/2014	29	4804	4833
3/14/2014	30	4449	4479
3/17/2014	32	3829	3861
3/19/2014	32	3448	3480
3/24/2014	32	3703	3735
3/28/2014	32	3703	3735
4/1/2014	32	3703	3735
4/3/2014	32	3320	3352
4/7/2014	15	4220	4235
4/15/2014	30	4205	4235
4/23/2014	31	4327	4358
5/1/2014	31	4327	4358
5/7/2014	31	4081	4112
5/14/2014	30	4205	4235
5/22/2014	31	4081	4112
5/29/2014	31	3994	4025
6/6/2014	31	4081	4112
6/13/2014	32	3829	3861
6/20/2014	32	3955	3987
7/3/2014	31	4081	4112
7/10/2014	30	4205	4235
7/18/2014	30	4205	4235
7/28/2014	30	4205	4235
8/4/2014	30	4205	4235
8/14/2014	32	3955	3987
8/20/2014	31	4081	4112
8/29/2014	32	3955	3987
9/4/2014	32	3703	3735
9/11/2014	32	3576	3608
9/18/2014	32	3320	3352
9/26/2014	32	3448	3480
9/30/2014	32	3576	3608
10/7/2014	32	3320	3352
10/14/2014	32	3320	3352
10/21/2014	32	3955	3987
10/30/2014	32	3955	3987

Table 3
Temporary Sump Recovery Volumes
Hydrocarbon Seep Area
Western Refining Southwest, Inc., Gallup Refinery

Date	Hydrocarbon Recovered (gallons)	Water Pumped (gallons)	Total Fluid Pumped (gallons)
11/7/2014	32	3320	3352
11/12/2014	32	3320	3352
11/18/2014	32	3064	3096
12/4/2014	32	3829	3861
12/9/2014	32	3955	3987
12/15/2014	31	4081	4112
12/24/2014	31	4081	4112
12/30/2014	32	3703	3735
1/8/2015	31	4081	4112
1/21/2015	31	4327	4358
1/29/2015	32	3448	3480
2/6/2015	32	3448	3480
2/11/2015	32	3320	3352
3/5/2015	29	4688	4717
3/12/2015	31	4081	4112
3/16/2015	31	4081	4112
3/25/2015	32	3703	3735
3/31/2015	32	3955	3987
4/13/2015	32	3829	3861
4/20/2015	32	3703	3735
4/27/2015	16	4096	4112
4/30/2015	16	4096	4112
5/11/2015	16	4220	4236
5/29/2015	16	3971	3987
6/8/2015	16	4096	4112
6/12/2015	16	4096	4112
total [2]	5,343	429,356	461,699

1 - two loads were removed on this date

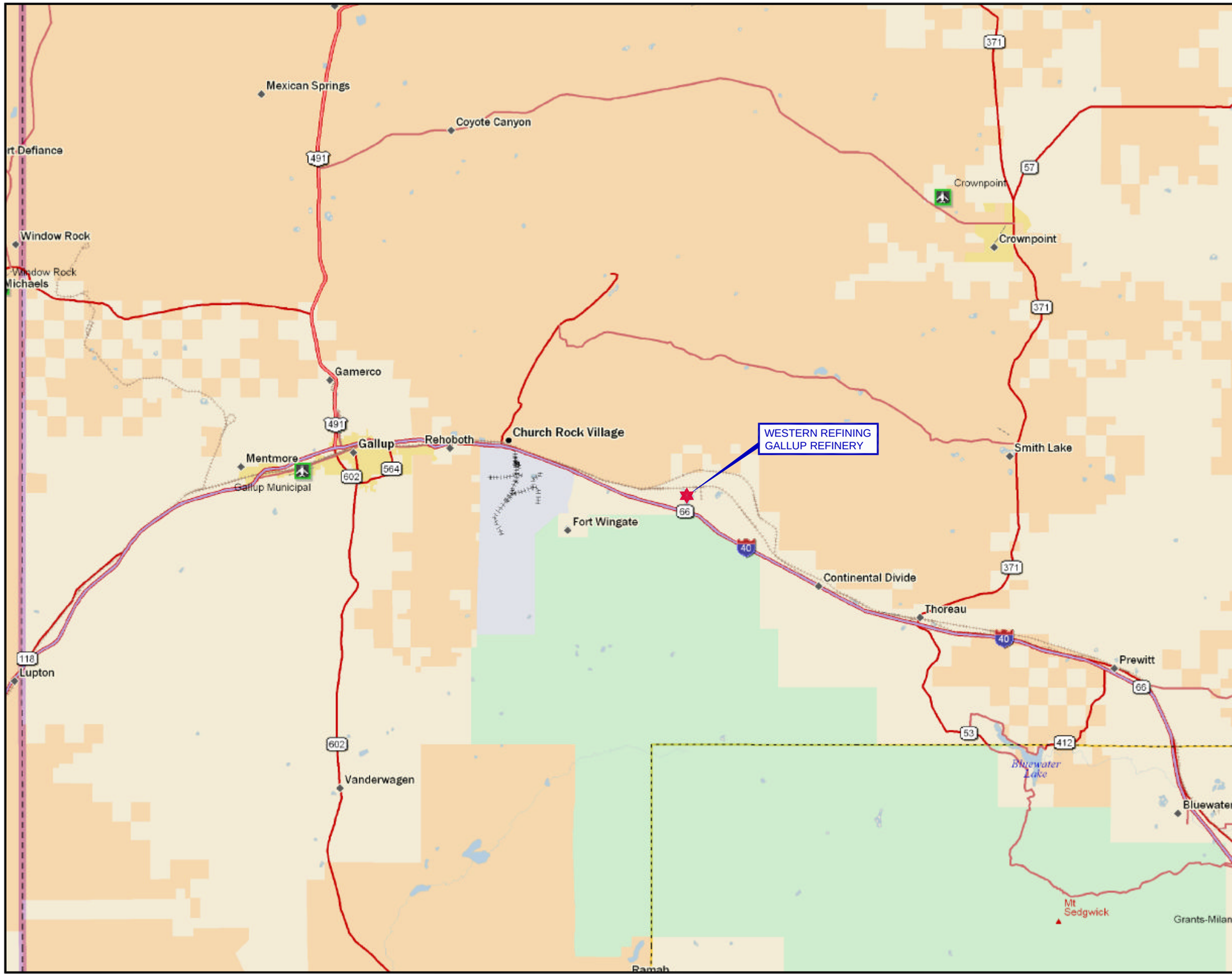
2 - separate totals for hydrocarbon and water not available for full time period

Table 4
Monitoring well Recovery Volumes
Hydrocarbon Seep Area
Western Refining Southwest, Inc., Gallup Refinery

Well ID	Date	Hydrocarbon Recovered (gallons)
MKTF-01	8/14/2014	0.3
	2/25/2015	0.5
MKTF-03	8/14/2014	0.7
	2/25/2015	0.1
	6/30/2015	0.5
MKTF-05	8/14/2014	0.7
	2/25/2015	0.2
	6/30/2015	0.4
MKTF-06	8/14/2014	2.0
	2/25/2015	0.2
	6/30/2015	0.5
MKTF-07	8/14/2014	0.7
	2/25/2015	0.1
	6/30/2015	1.2
MKTF-08	8/14/2014	3.9
	2/25/2015	0.4
	6/30/2015	0.3
MKTF-09	2/25/2015	0.3
MKTF-12	8/14/2014	0.7
	2/25/2015	0.1
	6/30/2015	1.5
MKTF-13	8/14/2014	0.7
	2/25/2015	0.1
	6/30/2015	0.9
MKTF-14	8/14/2014	0.3
	2/25/2015	0.3
	6/30/2015	0.3
MKTF-15	6/30/2015	0.5
MKTF-45	6/30/2015	2.9
	total	21

Figures

Figure 1	Site Location Map
Figure 2	Location Map of 2013 Soil Boring/Temporary Wells, Hand Augers and Excavations
Figure 3	Distillation Curves
Figure 4	Sewer Line Excavation near Bundle Cleaning Pad
Figure 5	Cross Section Location & Potentiometric Surface Map April 2014
Figure 6	Potentiometric Map March 2015
Figure 7	Cross Section A-A'
Figure 8	Cross Section B-B’
Figure 9	Cross Section C-C’
Figure 10	Benzene Map March 2015
Figure 11	1,1-Dichloroethane Map March 2015
Figure 12	Dissolved Iron Map March 2015
Figure 13	MTBE Map March 2015
Figure 14	Naphthalene Map March 2015
Figure 15	1,2,4-Trimethylbenzene Map March 2015
Figure 16	Separate-Phase Hydrocarbon Thickness Map March 2015



Map Source: DeLorme Street Atlas USA 2007 Plus.

0 5
SCALE IN MILES

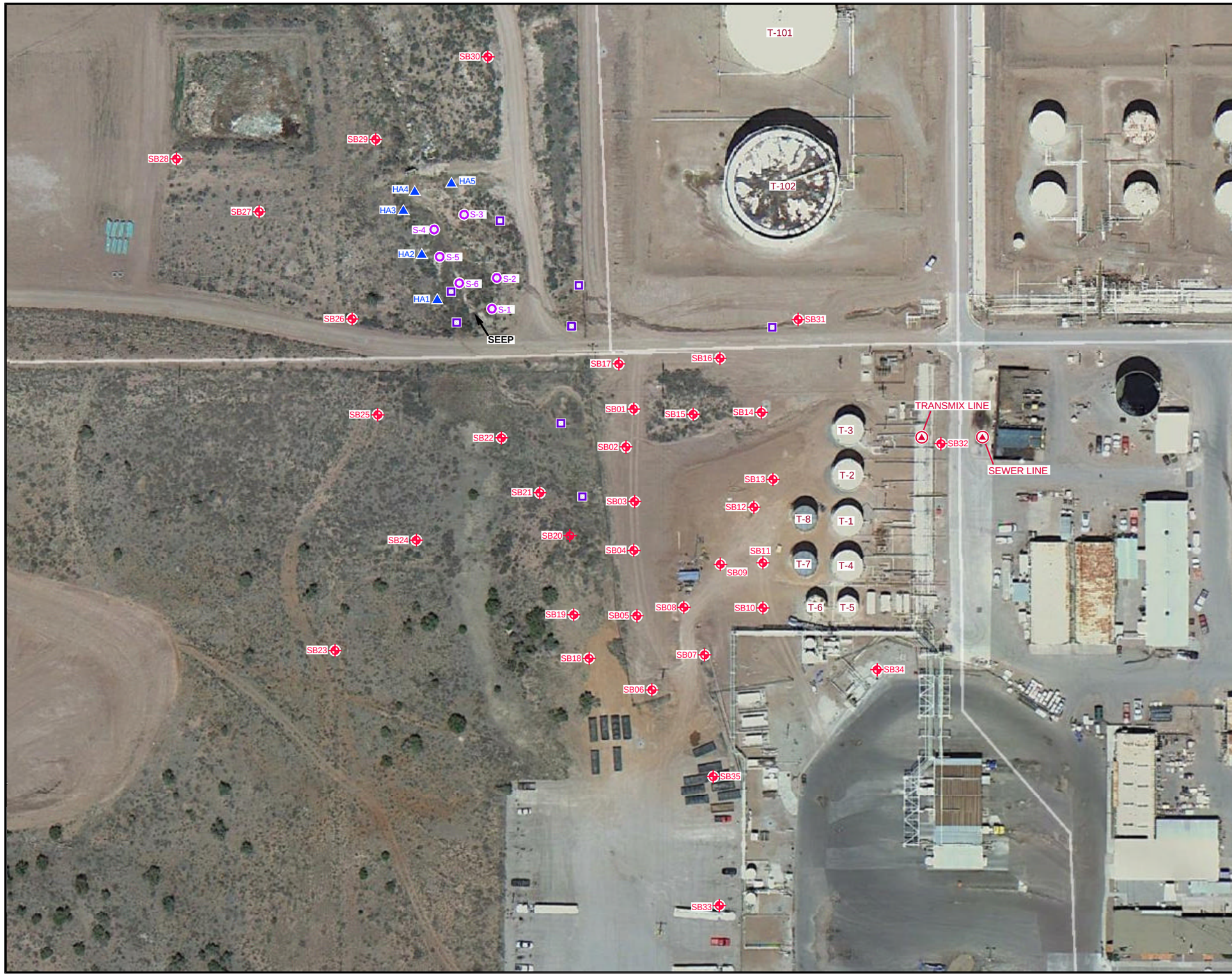
Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE:07/13/14	FILE:WestRef-B198

FIGURE 1
SITE LOCATION MAP
GALLUP REFINERY

DiSorbo
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Map Source: Google Map, 05/03/2012.

0 100
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

LEGEND

SB01	SOIL BORING / TEMPORARY WELL LOCATION
HA1	HAND AUGER LOCATION
	EXCAVATION LOCATION
S-1	TEMPORARY SUMP
	RELEASE POINT

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB45

FIGURE 2
LOCATION MAP OF 2013
SOIL BORING / TEMPORARY WELLS,
HAND AUGERS AND EXCAVATIONS

DiSorbo
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

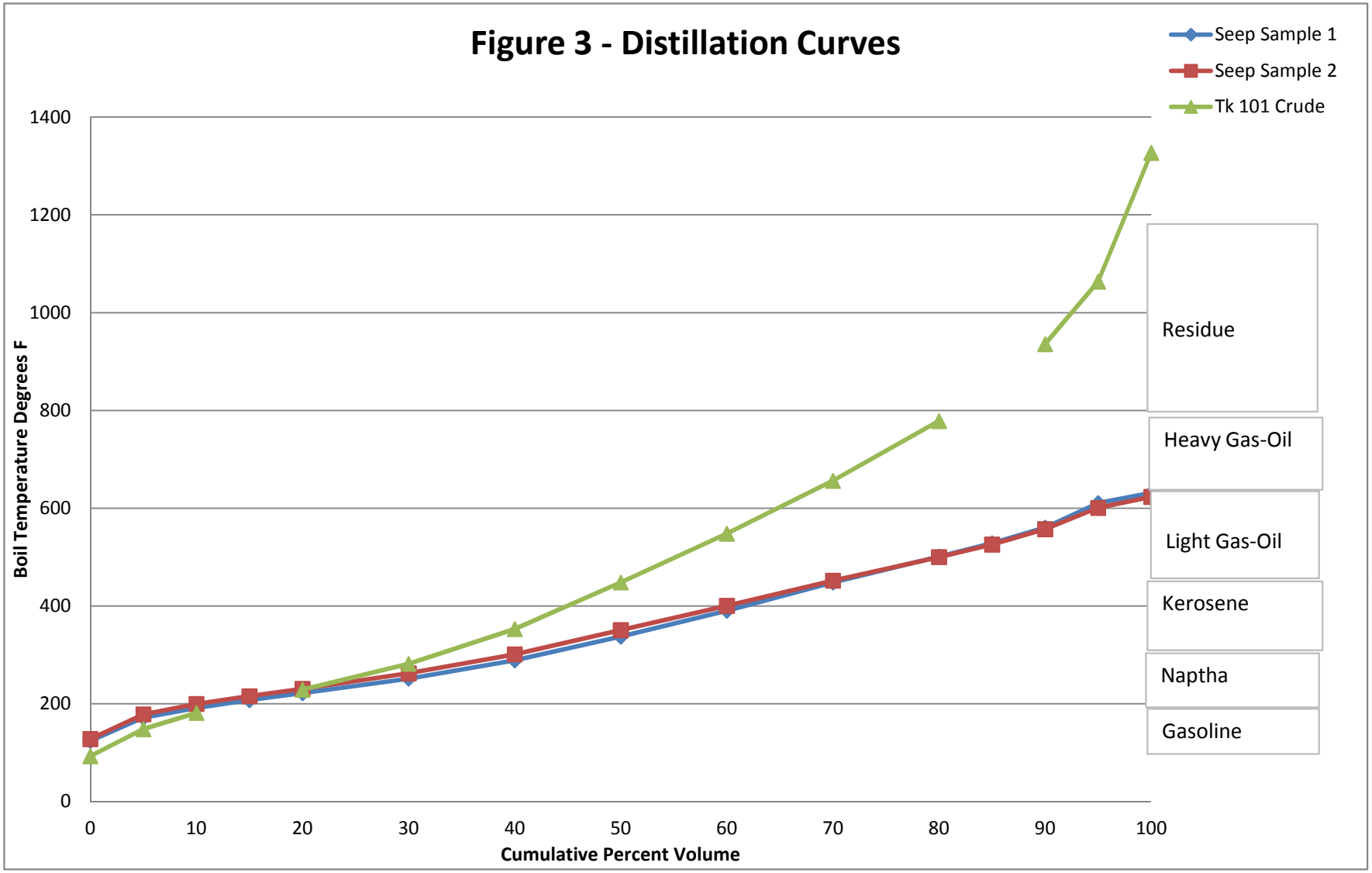
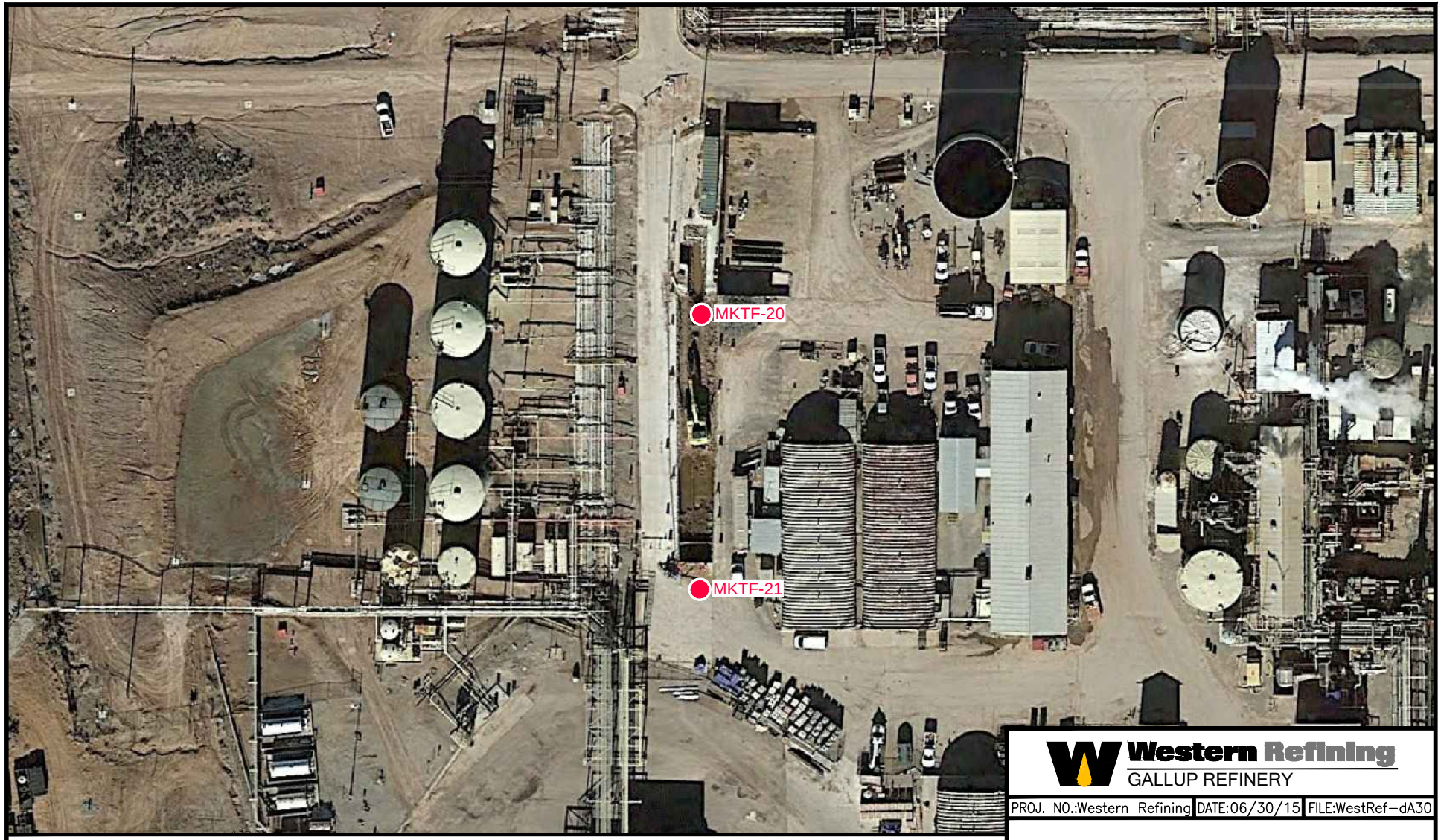


Figure 3 - Distillation Curves
Seep Sample 1
Seep Sample 2
Tk 101 Crude
Boil Temperature Degrees F
1400
1200
1000
800
600
400
200
0
0
10
20
30
40
50
60
70
80
90
100
Cumulative Percent Volume
Residue
Heavy Gas-Oil
Light Gas-Oil
Kerosene
Naptha
Gasoline



Aerial Map Source: Google Map, 01/05/2014.

N

0 80
SCALE IN FEET

LEGEND

MONITORING WELL LOCATION
(PERMANENT WELL)

Western Refining
GALLUP REFINERY

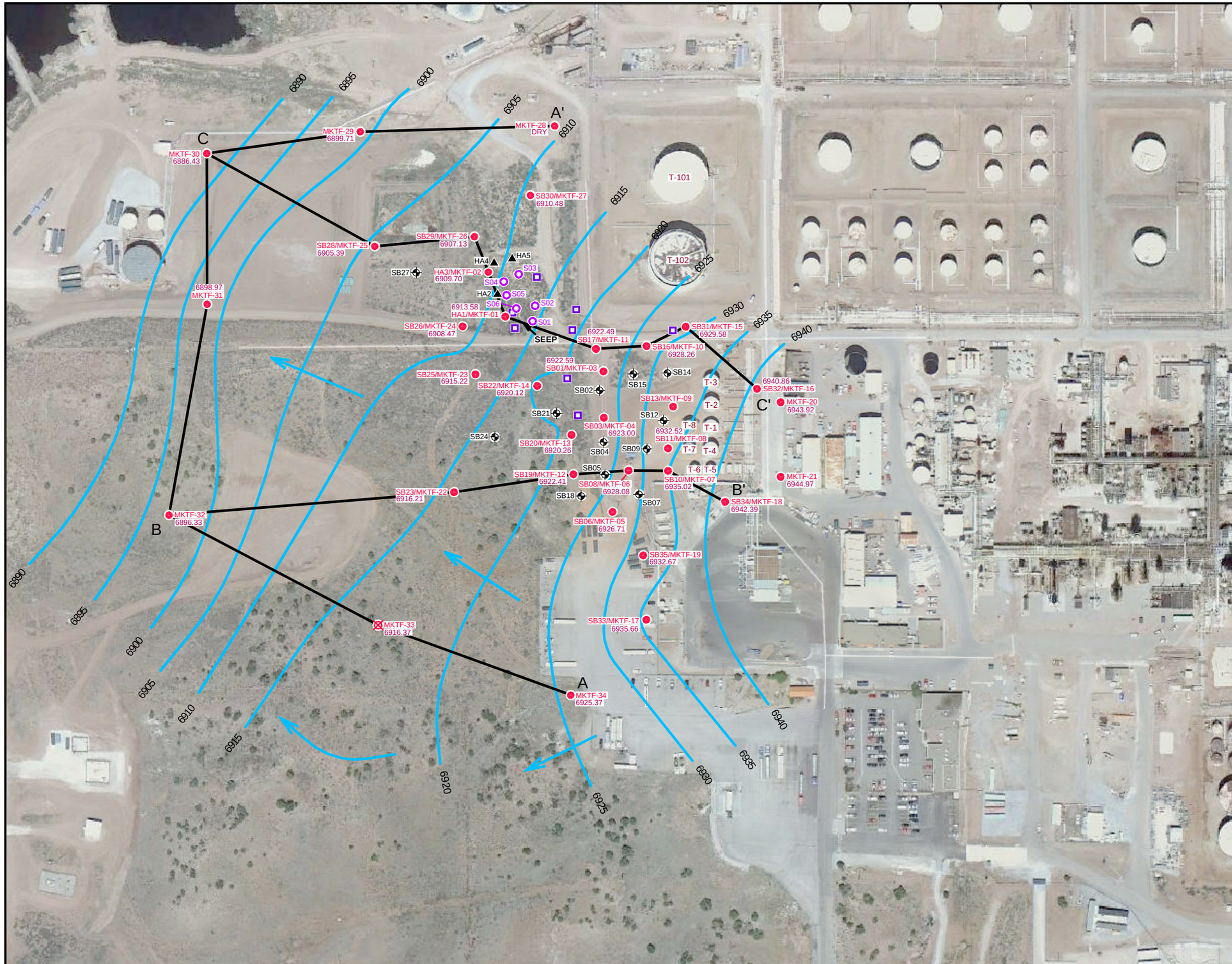
PROJ. NO.:Western Refining	DATE:06/30/15	FILE:WestRef-dA30

FIGURE 4

SEWER LINE EXCAVATION
NEAR BUNDLE CLEANING PAD

DiSorbo
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Aerial Map Source: Google Map, 05/03/2012.

0 200
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

LEGEND

MKTF-33	TEMPORARY WELL LOCATION
SB01	TEMPORARY WELL LOCATION (PLUGGED)
HA1	HAND AUGER LOCATION (PLUGGED)
	EXCAVATION LOCATION
S01	TEMPORARY SUMP
	MONITORING WELL LOCATION (PERMANENT WELL)
6930	POTENTIOMETRIC CONTOUR (FT) (5 FT INTERVAL)
	GROUNDWATER FLOW DIRECTION
6926.71	GROUNDWATER ELEVATION (FT) MEASURED IN APRIL 2014
A——A'	LINE OF CROSS-SECTION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 10/13/14 | FILE: WestRef-dB06

FIGURE 5
CROSS SECTION LOCATION &
POTENTIOMETRIC SURFACE MAP
APRIL 2014

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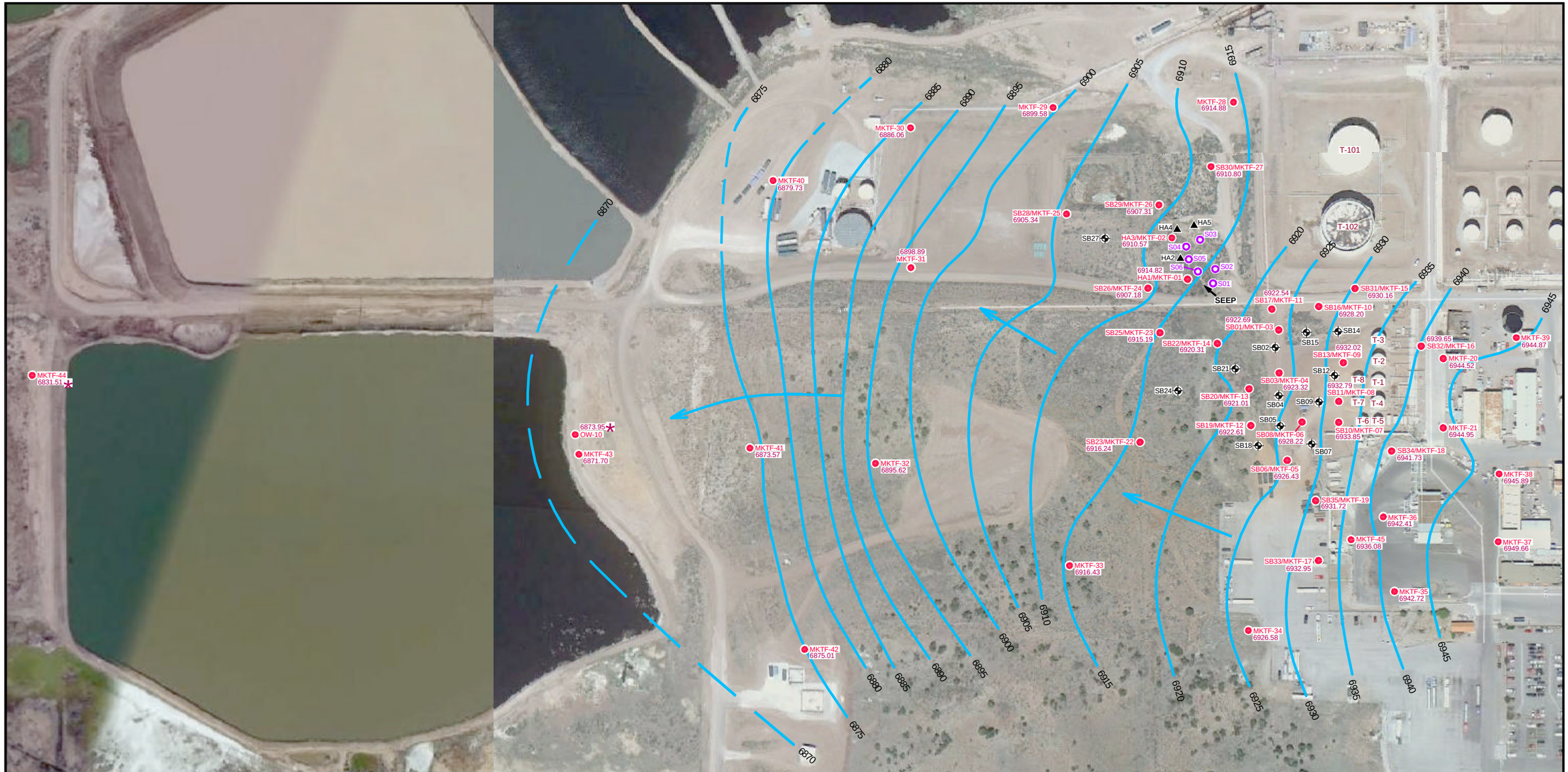

Aerial Map Source: Google Map, 01/05/2014.

0 220
SCALE IN FEET

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
HA1	HAND AUGER LOCATION (PLUGGED)
S01	TEMPORARY SUMP
●	MONITORING WELL LOCATION (PERMANENT WELL)
6930	POTENTIOMETRIC CONTOUR (FT) (5 FT INTERVAL)
←	GROUNDWATER FLOW DIRECTION
6875.01	POTENTIOMETRIC SURFACE MEASURED RELATIVE TO MEAN SEA LEVEL (MARCH 2015)
*	MEASUREMENT NOT USED IN CONTOURING

NEW MEXICO
QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 05/28/15 | FILE: WestRef-dB34

FIGURE 6
POTENTIOMETRIC MAP
MARCH 2015

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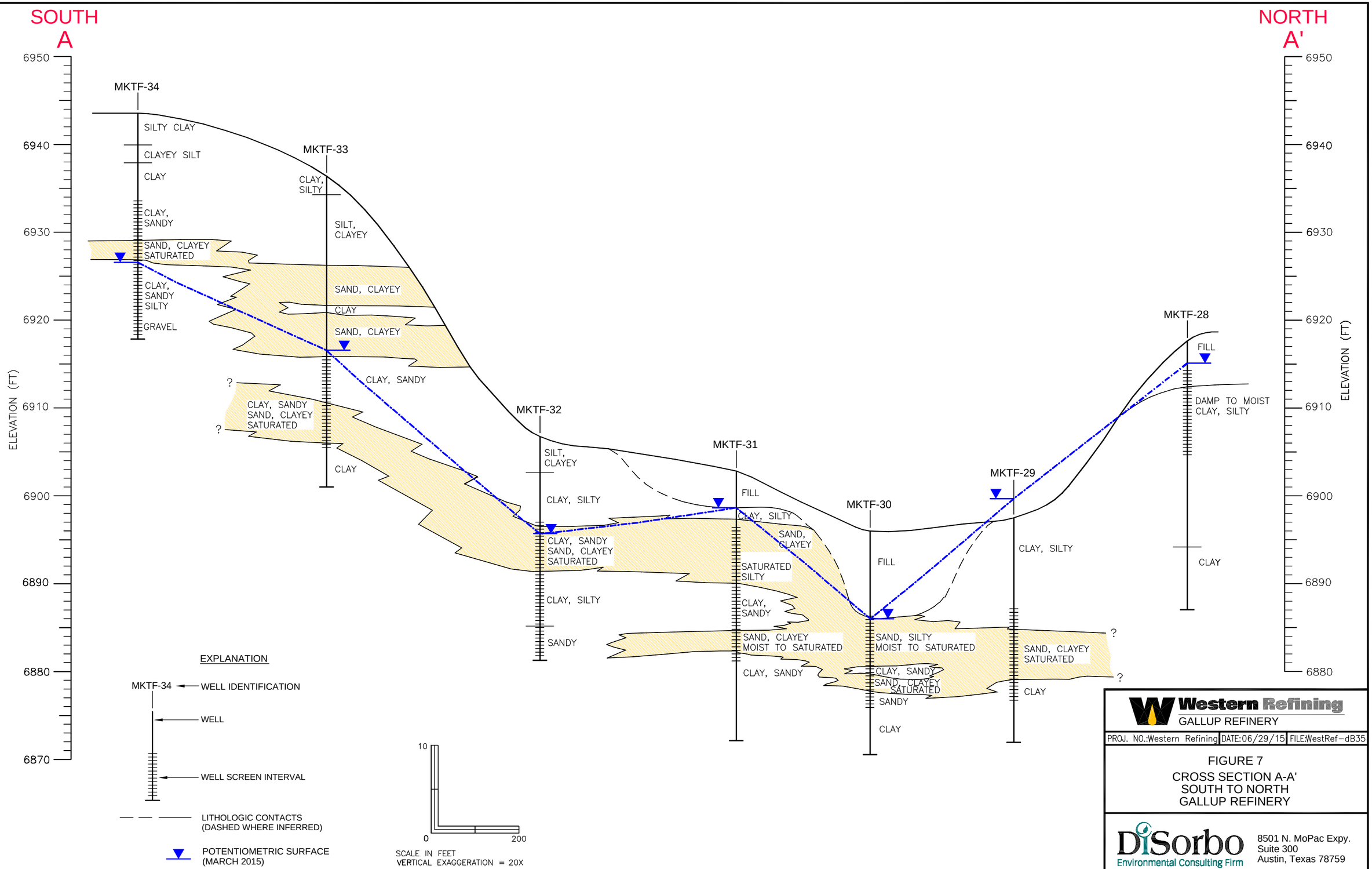
SOUTH
A
NORTH
A'
ELEVATION (FT)
6950
6940
6930
6920
6910
6900
6890
6880
6870
MKTF-34
SILTY CLAY
CLAYEY SILT
CLAY
CLAY, SANDY
SAND, CLAYEY SATURATED
CLAY, SANDY SILTY
GRAVEL
MKTF-33
CLAY, SILTY
SILT, CLAYEY
SAND, CLAYEY
CLAY
SAND, CLAYEY
CLAY, SANDY
?
CLAY, SANDY SAND, CLAYEY SATURATED
?
CLAY
MKTF-32
SILT, CLAYEY
CLAY, SILTY
CLAY, SANDY SAND, CLAYEY SATURATED
CLAY, SILTY
SANDY
MKTF-31
FILL
CLAY, SILTY
SAND, CLAYEY
SATURATED SILTY
CLAY, SANDY
SAND, CLAYEY MOIST TO SATURATED
CLAY, SANDY
MKTF-30
FILL
SAND, SILTY MOIST TO SATURATED
CLAY, SANDY
SAND, CLAYEY SATURATED
SANDY
CLAY
MKTF-29
CLAY, SILTY
SAND, CLAYEY SATURATED
?
?
CLAY
MKTF-28
FILL
DAMP TO MOIST CLAY, SILTY
CLAY
EXPLANATION
MKTF-34
WELL IDENTIFICATION
WELL
WELL SCREEN INTERVAL
LITHOLOGIC CONTACTS (DASHED WHERE INFERRED)
POTENTIOMETRIC SURFACE (MARCH 2015)
10
0
200
SCALE IN FEET
VERTICAL EXAGGERATION = 20X
Western Refining
GALLUP REFINERY
PROJ. NO.:Western Refining
DATE:06/29/15
FILE:WestRef-dB35
FIGURE 7
CROSS SECTION A-A'
SOUTH TO NORTH
GALLUP REFINERY
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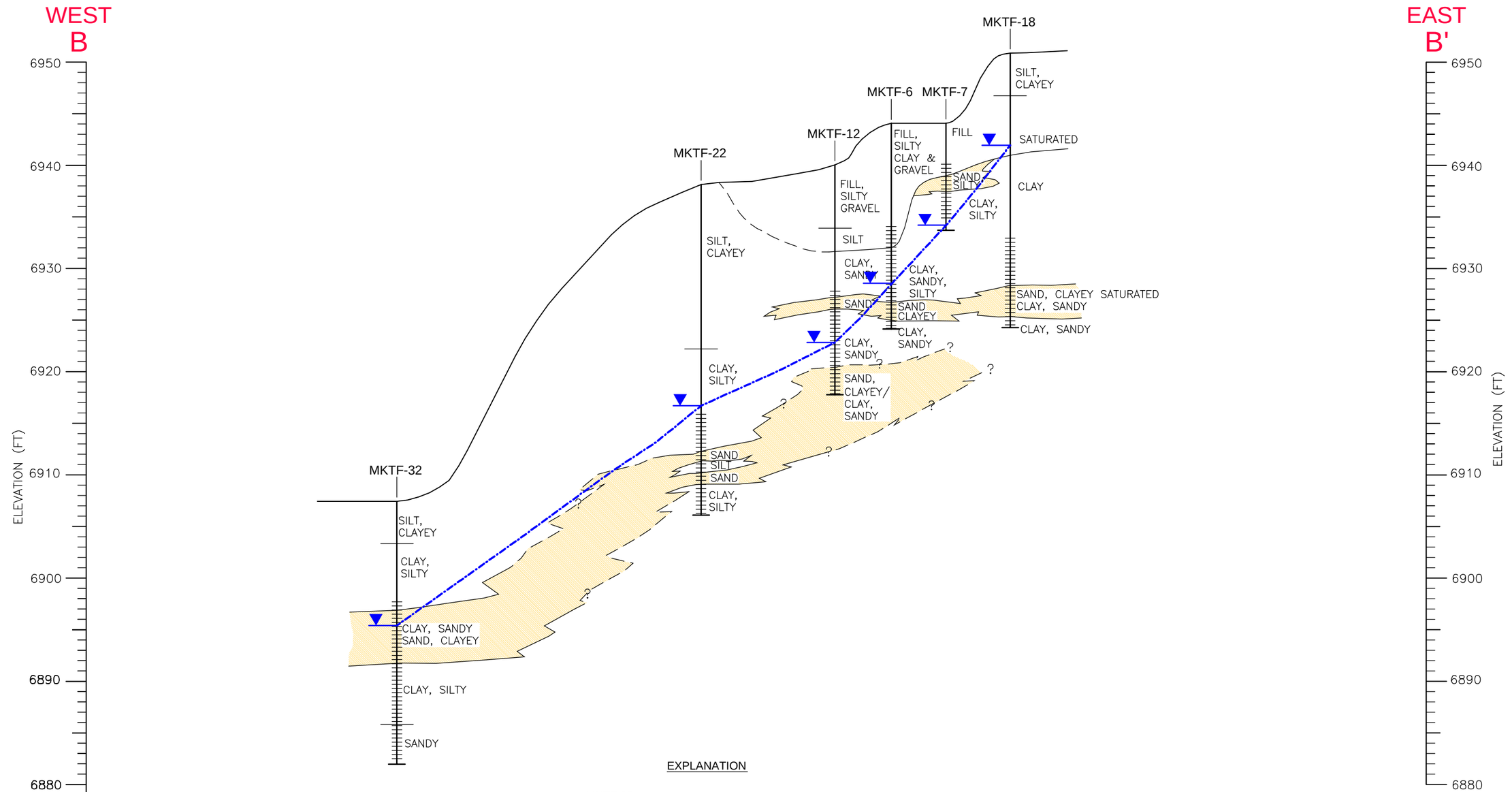

EXPLANATION

MKTF-32 ← WELL IDENTIFICATION

← WELL

← WELL SCREEN INTERVAL

LITHOLOGIC CONTACTS (DASHED WHERE INFERRED)

POTENTIOMETRIC SURFACE (MARCH 2015)

10 0 200

SCALE IN FEET
VERTICAL EXAGGERATION = 20X

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:06/29/15	FILE:WestRef-dB36

FIGURE 8
CROSS SECTION B-B'
WEST TO EAST
GALLUP REFINERY

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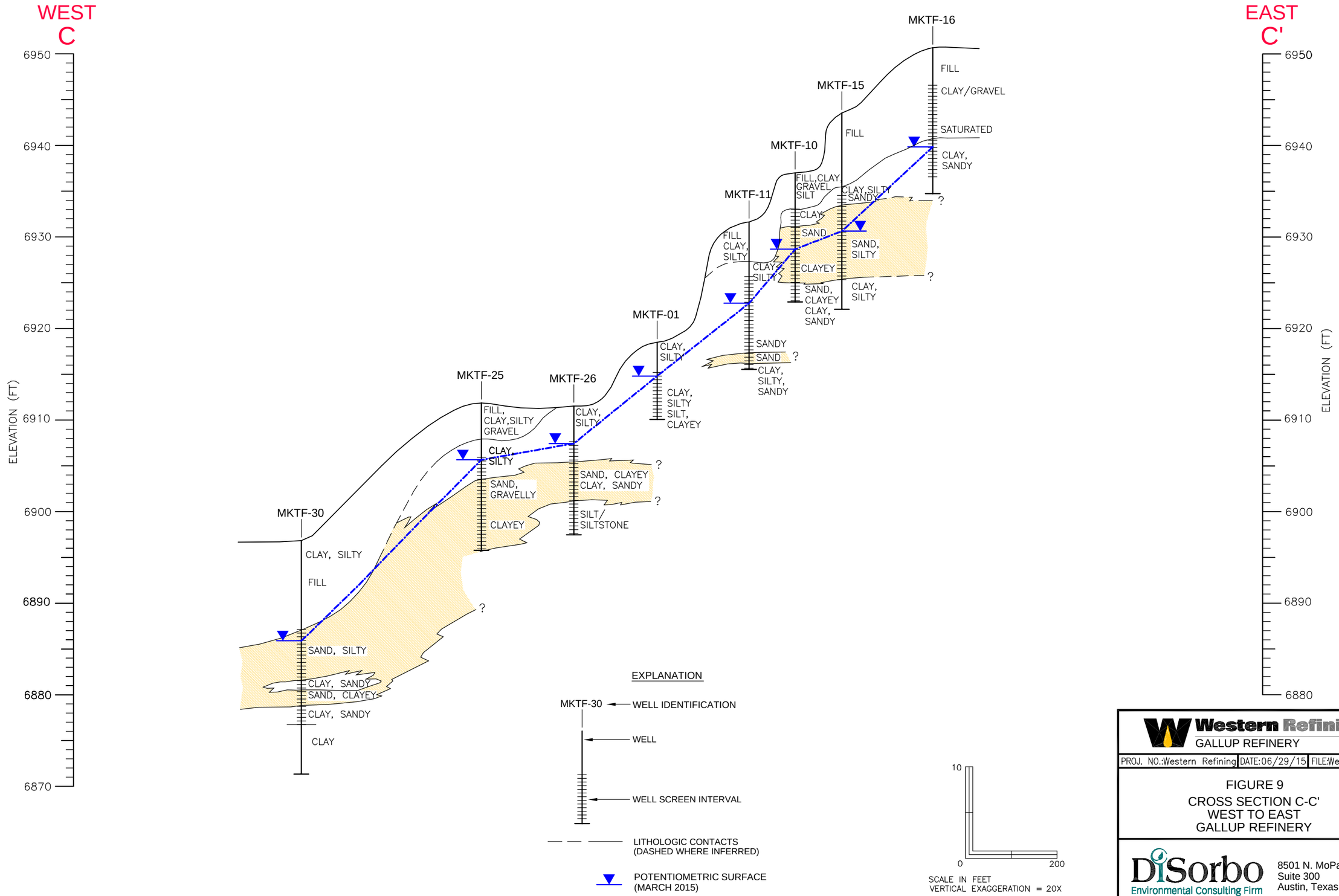

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining	DATE:06/29/15	FILE:WestRef-dB37

FIGURE 9
CROSS SECTION C-C'
WEST TO EAST
GALLUP REFINERY

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Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
	MONITORING WELL LOCATION (PERMANENT WELL)
3.3	BENZENE CONCENTRATION (mg/l)
	SCREENING LEVEL = 0.005 mg/l
SPH	SEPARATE PHASE HYDROCARBON
	ISOCONTOUR OF BENZENE CONCENTRATION (mg/l)

N

0 220
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB41

FIGURE 10
BENZENE
CONCENTRATION MAP
MARCH 2015

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Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
	MONITORING WELL LOCATION (PERMANENT WELL)
0.019	1,1-DICHLOROETHANE CONCENTRATION (mg/l)
	SCREENING LEVEL = 0.025 mg/l
SPH	SEPARATE PHASE HYDROCARBON
	ISOCONTOUR OF 1,1-DICHLOROETHANE CONCENTRATION (mg/l)

N

0 220
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB40

FIGURE 11
1,1-DICHLOROETHANE
CONCENTRATION MAP
MARCH 2015

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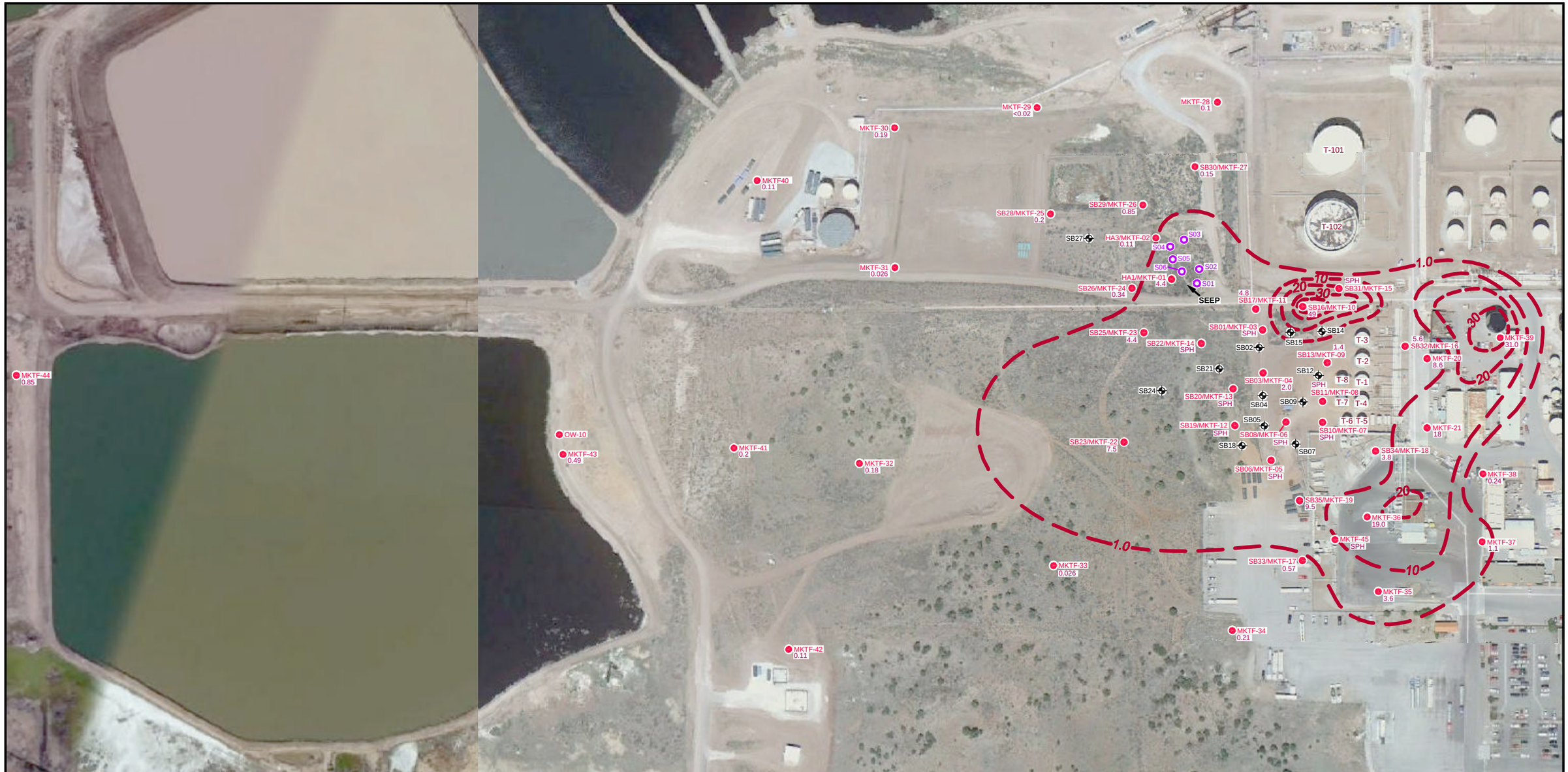

Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
●	MONITORING WELL LOCATION (PERMANENT WELL)
0.026	DISSLOVED IRON CONCENTRATION (mg/l)
	SCREENING LEVEL = 1.0 mg/l
SPH	SEPARATE PHASE HYDROCARBON
— — —	ISOCONTOUR OF DISSLOVED IRON CONCENTRATION (mg/l)

N

0 220
SCALE IN FEET

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining	DATE:06/30/15	FILE:WestRef-bB39

FIGURE 12
DISSOLVED IRON
CONCENTRATION MAP
MARCH 2015

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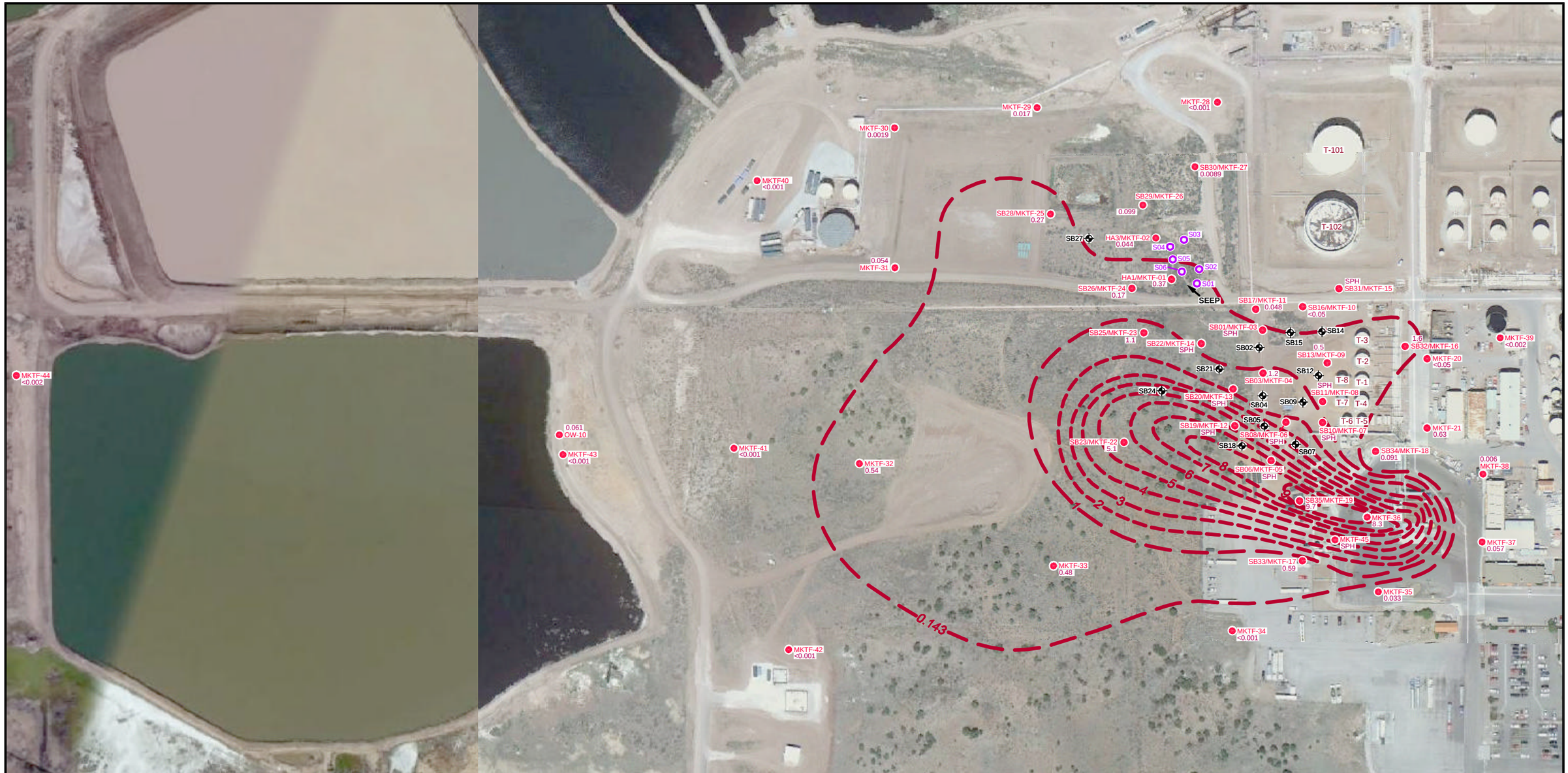

Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
●	MONITORING WELL LOCATION (PERMANENT WELL)
1.1	MTBE CONCENTRATION (mg/l)
	SCREENING LEVEL = 0.143 mg/l
SPH	SEPARATE PHASE HYDROCARBON
— — —	ISOCONTOUR OF MTBE CONCENTRATION (mg/l)

N

0 220
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB42

FIGURE 13
MTBE
CONCENTRATION MAP
MARCH 2015

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Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
●	MONITORING WELL LOCATION (PERMANENT WELL)
0.3	NAPHTHALENE CONCENTRATION (mg/l)
	SCREENING LEVEL = 0.00165 mg/l
SPH	SEPARATE PHASE HYDROCARBON
— — —	ISOCONTOUR OF NAPHTHALENE CONCENTRATION (mg/l)

N

0 220
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB38

FIGURE 14
NAPHTHALENE
CONCENTRATION MAP
MARCH 2015

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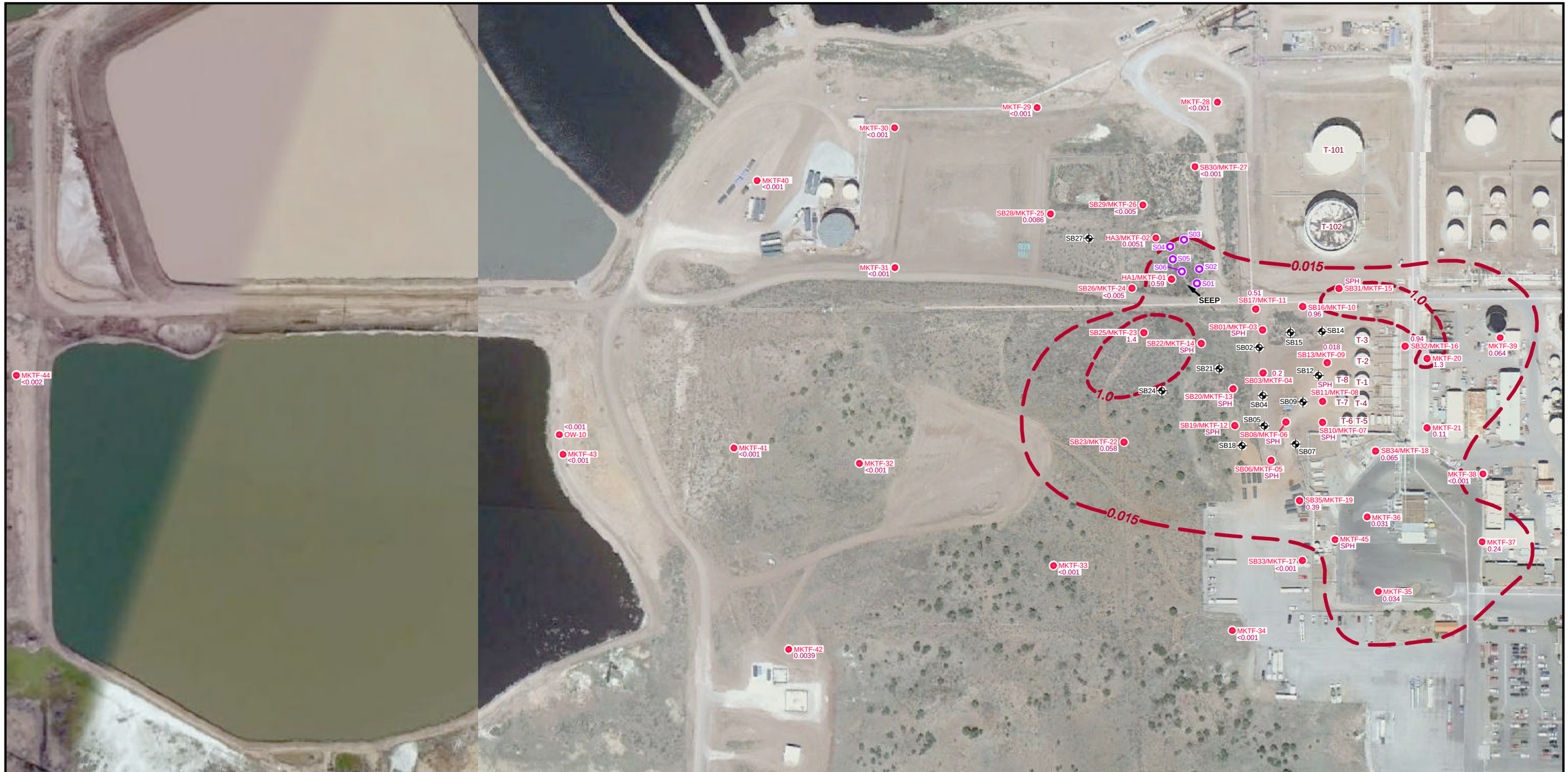

Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
●	MONITORING WELL LOCATION (PERMANENT WELL)
1.4	1,2,4-TRIMETHYLBENZENE CONCENTRATION (mg/l)
	SCREENING LEVEL = 0.015 mg/l
SPH	SEPARATE PHASE HYDROCARBON
— — —	ISOCONTOUR OF 1,2,4-TRIMETHYLBENZENE CONCENTRATION (mg/l)

N

0 220
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB43

FIGURE 15
1,2,4-TRIMETHYLBENZENE
CONCENTRATION MAP
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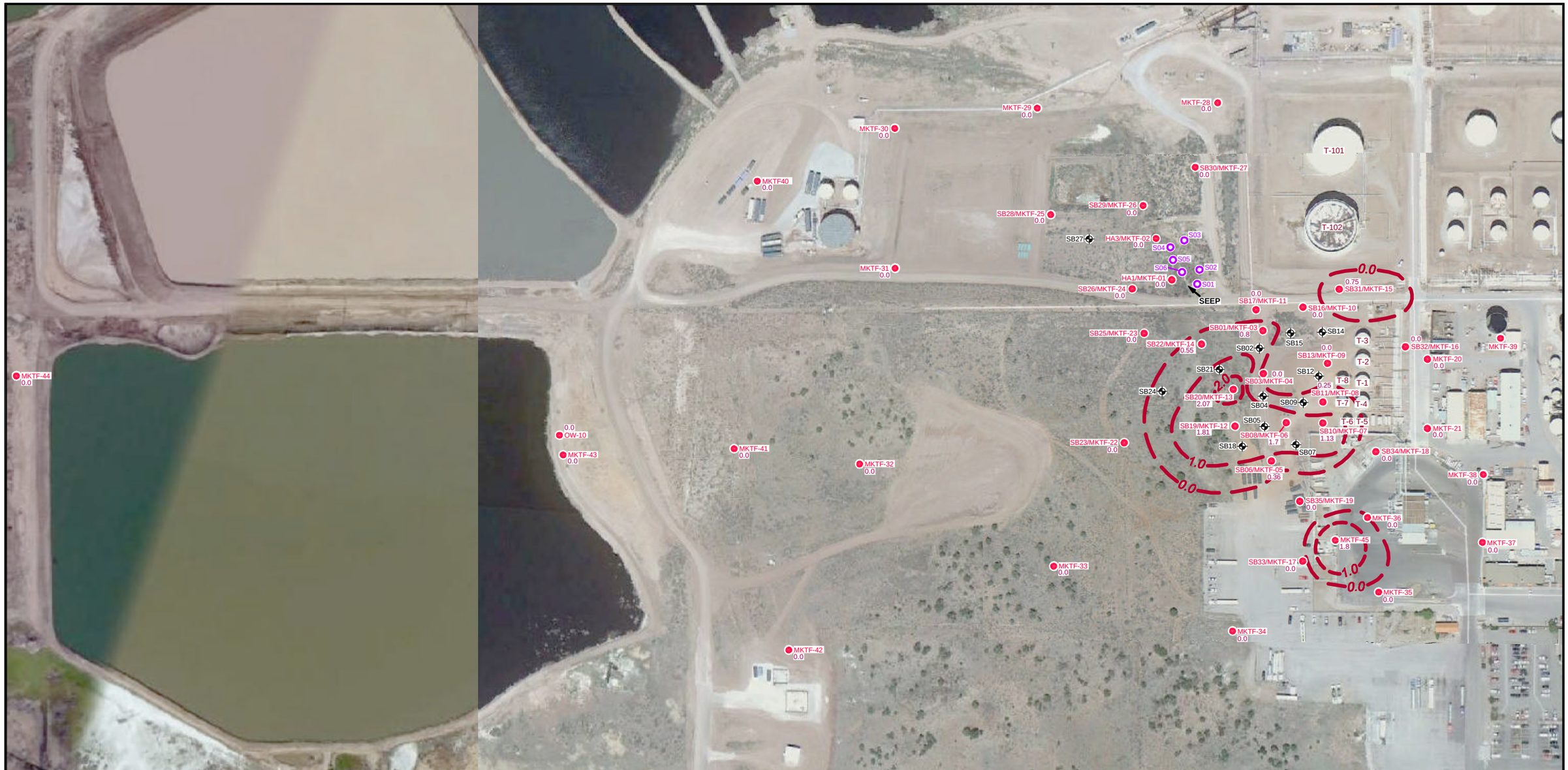

Aerial Map Source: Google Map, 01/05/2014.

LEGEND

SB01	TEMPORARY WELL LOCATION (PLUGGED)
S01	TEMPORARY SUMP
	MONITORING WELL LOCATION (PERMANENT WELL)
1.81	SEPARATE PHASE HYDROCARBON THICKNESS (FT)
	CONTOUR OF SEPARATE PHASE HYDROCARBON THICKNESS (FT)

N

0 220
SCALE IN FEET

NEW MEXICO

QUADRANGLE LOCATION

Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 06/30/15 | FILE: WestRef-bB44

FIGURE 16
SEPARATE PHASE
HYDROCARBON THICKNESS MAP
MARCH 2015

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Appendix A

Boring / Well Completion Logs

LOG OF BORING

Boring No.: HA2
Start Date: 7/11/2013 08:40
Finish Date: 7/11/2013 09:40

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'

Total Depth: 9' bgl
Ground Water: Saturated @ 4.75' bgl
Elev., TOC (ft. msl): 212.86
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): 212.30
Site Coordinates:
N 3058.77 **W** 1182.85

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0–2					15.4 86°F		100	**Silty Clay (CL)** Low plasticity, soft, damp, brown/reddish brown, no odor, damp	0–2
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	2–4
4–6					15.3 86°F		100	**Silty Clay (CL)** Similar to above with saturated sand seams, strong hydrocarbon odor, no phase-separated hydrocarbon	4–6
6–8									6–8
8–9					1250 86°F			Total Depth = 9' BGL	8–9
10								Set temporary 1" Well Screened: 5-9' bgl Filter Pack: 2-9' bgl Bentonite:0-2' bgl Stickup: 0.5'	10
12									12
14									14
16									16

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LOG OF BORING

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): 210.84
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): 210.24
Site Coordinates:
N 3098.06 **W** 1177.09

Boring No.: HA3
Start Date: 7/11/2013 12:45
Finish Date: 7/11/2013 13:45

Depth (ft.)	Sampling: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0								**Silty Clay (CL)** Low plasticity, firm, damp, brown-reddish brown, no odor	0
2					24.6 98°F		100		2
4									4
					20.1 98°F			**Silty Clay (CL)** Similar to above, odor at 6' bgl with black discolorations	
6					400 98°F		100		6
8					933 98°F		100	**Sandy Clay (CL)** Low plasticity, soft, moist to saturated at 9' bgl, hydrocarbon odor, no phase-separated hydrocarbon	8
				9'	800 98°F				
10							100	**Sandy Clay/Clayey Sand (SC/CL)** Fine grain, compact, saturated, dark brown, hydrocarbon odor, no phase-separated hydrocarbon	10
								Total Depth = 10.75' BGL	
12									12
14									14
16									16

Set temporary 1" Well
Screened: 5.75-10.75' bgl
Filter Pack: 2-10.75' bgl
Bentonite: 0-2' bgl
Stickup: 0.75'

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LOG OF BORING

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'

Total Depth: 7' bgl
Ground Water: Saturated @ 4' bgl
Elev., TOC (ft. msl): 211.26
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): 208.25
Site Coordinates:
N 3119.63 **W** 1190.00

Boring No.: HA4
Start Date: 7/11/2013 14:00
Finish Date: 7/11/2013 15:00

Depth (ft.)	Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0							100	**Silt (ML)** Low plasticity, soft, dry, light brown, no odor	0
2					8.2 384 90°F		100	**Sandy Gravelly Clay (CL)** Low plasticity, firm, damp, brown, no odor	2
4				4'	394 90°F		100	**Sandy Gravelly Clay (CL)** Similar to above, black, hydrocarbon odor, moist	4
6							100	**Sandy Gravelly Clay (CL)** Similar to above, saturated, oily, hydrocarbon odor, black to dark brown to brown	6
								Total Depth = 7' BGL	
8									8
10									10
12									12
14								Set temporary 1" Well Screened: 2-7' bgl Filter Pack: 1-7' bgl Bentonite:0-1' bgl Stickup: 3.25'	14
16									16

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LOG OF BORING

Boring No.: HA5
Start Date: 7/11/2013 15:10
Finish Date: 7/11/2013 16:15

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:

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: Sample Depth	Time	Sample Type/ Container/No.	Saturation	Organic Vapor (ppm)	USCS Class	Recovery (%)	Sample Description	Depth (ft.)
								Ground Surface	
0							100	**Silt (ML)** Low plasticity, very dense, dry to damp, brown, no odor	0
2					8.5 80°F		100	**Sandy Clay/Clayey Sand (CL)** Low plasticity, fine grain, compact, brown, no odor	2
4				5.5'					4
6					19.4 112 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

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WELL INSTALLATION

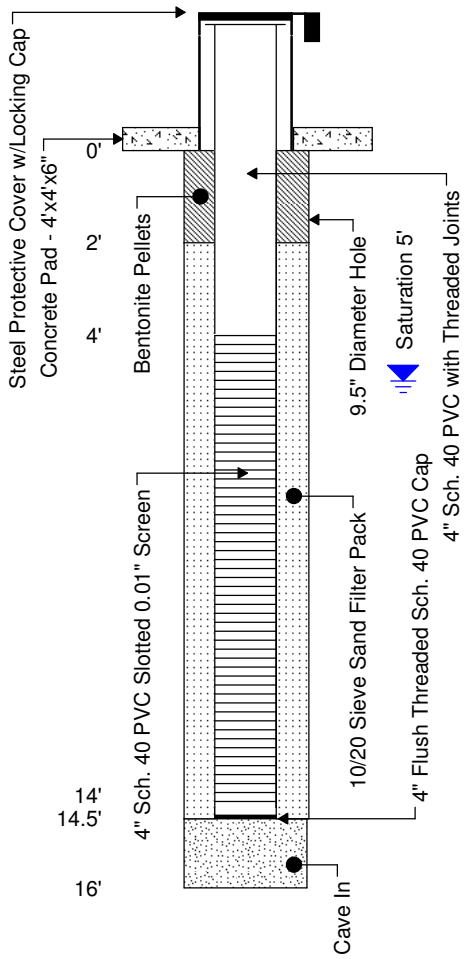
Well No.: MKTF-01
Start Date: 11/14/2013
Finish Date: 11/14/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.346' W 108°25.782'; Boring ID - HA1

Total Depth: 16' bgl
Ground Water: Saturated @ 5' bgl
Elev., TOC (ft. msl): 6920.67
Elev., PAD (ft. msl): 6918.28
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,864.41 **E** 2,545,561.73

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
				100	**Silty Clay (CL)** Low plasticity, soft, damp, reddish brown to brown, no odor
		5'		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
					Total Depth = 16' BGL

Completion Results



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WELL INSTALLATION

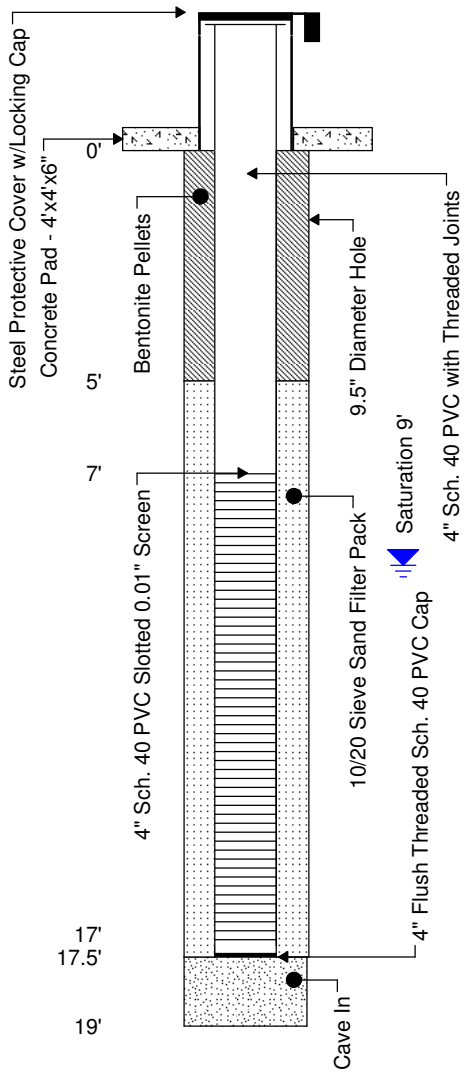
Well No.: MKTF-02
Start Date: 11/14/2013
Finish Date: 11/14/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.360' W 108°25.789'; Boring ID HA3

Total Depth: 19' bgl
Ground Water: Saturated @ 9' bgl
Elev., TOC (ft. msl): 6917.45
Elev., PAD (ft. msl): 6915.00
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,946.93 **E** 2,545,530.46

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	24.6			100	**Silty Clay (CL)** Low plasticity, firm, damp, brown-reddish brown, no odor
5	20.1			100	**Silty Clay (CL)** Similar to above, odor at 6' bgl with black discoloration
7	400				
9	933, 800	9'		100	**Sandy Clay (CL)** Low plasticity, soft, moist to saturated at 9' bgl, hydrocarbon odor, no phase-separated hydrocarbon
13				100	**Sandy Clay/Clayey Sand (SC/CL)** Fine grain, compact, saturated, dark brown, hydrocarbon odor, no phase-separated hydrocarbon
19					Total Depth = 19' BGL

Completion Results



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Sheet: **1 of 1**

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WELL INSTALLATION

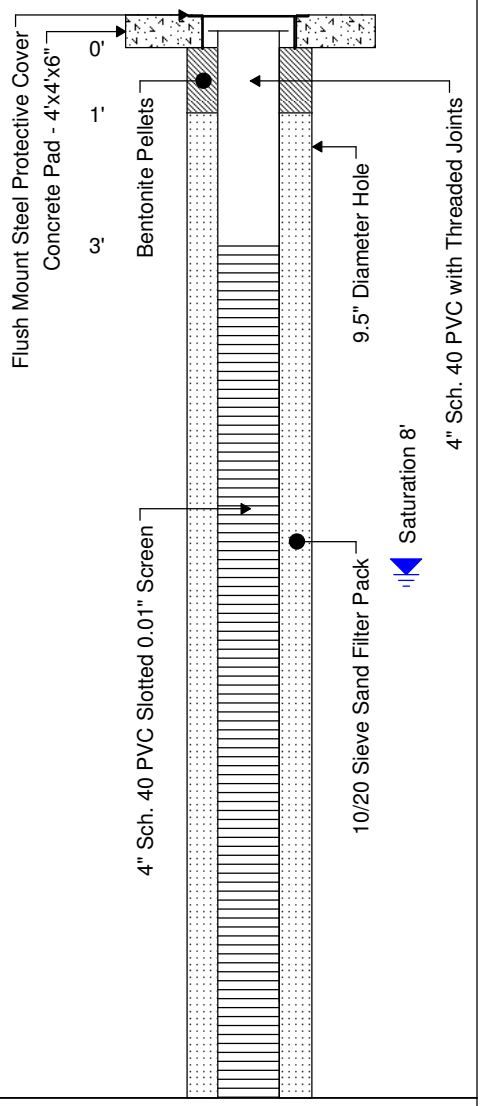
Well No.: MKTF-03
Start Date: 11/7/2013
Finish Date: 11/7/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.328' W108°25.743'; Boring ID - SB01

Total Depth: 19' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): 6931.31
Elev., PAD (ft. msl): 6931.73
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,746.53 **E** 2,545,756.87

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-1					Ground Surface
1	164			60	**Fill (Silt/Sand)** Fine grain, loose, dry to damp, brown, no odor
3	423			40	**Silty Clay (CL)** Low plasticity, firm, damp, brown/reddish brown, no odor
5	330			70	**Silty Clay (CL)** Similar to above, no odor
7	75	8'		90	**Silty Clay (CL)** Similar to above, sandy at base from 7.75-8.0' bgl, no odor
9	326			90	**Silty Clay (CL)** Fine grain sand seams throughout, saturated, phase-separated hydrocarbon, hydrocarbon odor, clear phase-separated hydrocarbon poured out of split spoon
11	312			90	**Silty Clay (CL)** Similar to above with sand seams, saturated with phase-separated hydrocarbon, hydrocarbon odor, dark brown
13	368			80	**Gravelly Sand (SW)** Fine to medium to coarse grain, loose, saturated with phase-separated hydrocarbon, black, hydrocarbon odor
15	700			60	**Gravelly Sand (SW)** Similar to above

Completion Results



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512/347-8243

WELL INSTALLATION

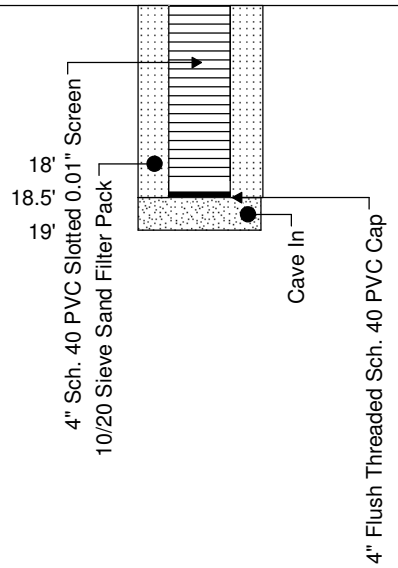
Well No.: MKTF-03
Start Date: 11/7/2013
Finish Date: 11/7/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.328' W108°25.743'; Boring ID - SB01

Total Depth: 19' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): 6931.31
Elev., PAD (ft. msl): 6931.73
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,746.53 **E** 2,545,756.87

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Silty Sand/Silty Clay (SM/CL) Low plasticity, firm, moist, brown, faint odor, no phase-separated hydrocarbon
17				10	**Silty Clay (CL)** Poor recovery
19	225			80	**Clay (CH)** High plasticity, very dense, damp, light reddish brown, faint odor
					Total Depth = 19' BGL

Completion Results



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512/347-8243

WELL INSTALLATION

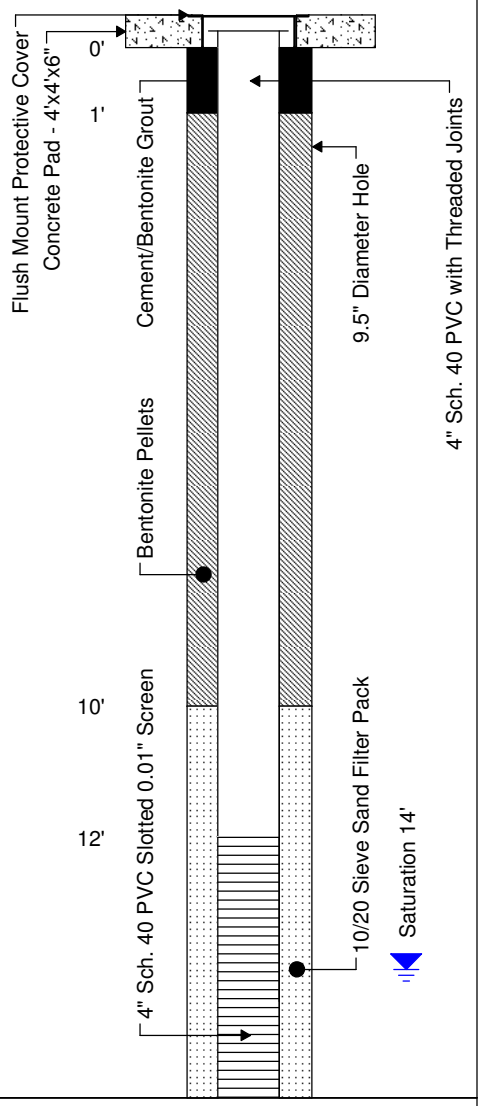
Well No.: MKTF-04
Start Date: 11/12/2013
Finish Date: 11/12/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.310' W 108°25.742'; Boring ID SB03

Total Depth: 24' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): 6933.57
Elev., PAD (ft. msl): 6933.90
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,649.46 **E** 2,545,752.83

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-1					Ground Surface
1	10.2			90	**Fill (Silt/Gravel)** Low plasticity, very dense, dry, light brown, no odor
3	11.7			80	**Fill (Silt/Gravel)** Similar to above, black, dense at base, no odor
5	16			90	**Silty Clay (CL)** Low plasticity, stiff, damp, reddish brown, no odor, calcareous
7	26			90	**Gravelly Sandy Clay (CL)** Low plasticity, loose to firm, damp, brown, no odor
9	708			70	**Silty Clay (CL)** Low plasticity, very soft, damp, reddish brown, hydrocarbon odor
11	369			80	**Clay (CH)** High plasticity, firm, damp, reddish brown, hydrocarbon odor
13	660	14'		90	**Sandy Clay/Clayey Sand (SC/CL)** Low plasticity, fine grain, soft, damp, reddish brown, hydrocarbon odor
15	85			90	**Sandy Clay (SC)** Similar to above, saturated sand seams, hydrocarbon odor, brown

Completion Results



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512/347-8243

WELL INSTALLATION

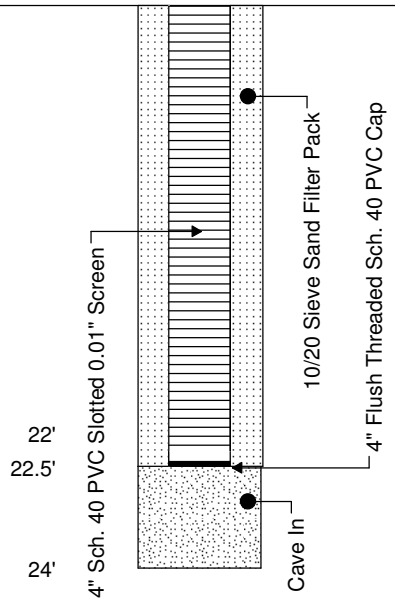
Well No.: MKTF-04
Start Date: 11/12/2013
Finish Date: 11/12/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.310' W 108°25.742'; Boring ID SB03

Total Depth: 24' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): 6933.57
Elev., PAD (ft. msl): 6933.90
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,649.46 **E** 2,545,752.83

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
17	64			70	**Sandy Clay (SC)** Similar to above, moist to saturated, hydrocarbon odor, brown
19	33			90	**Sandy Clay (SC)** Low plasticity, fine grain, soft, moist to saturated, light reddish brown, hydrocarbon odor, gravelly at base **Silty Clay (CL)** Low plasticity, stiff, damp, light reddish brown grading to yellowish/greenish gray, becomes more silty at base
21					
23					Total Depth = 24' BGL
25					
27					
29					
31					

Completion Results



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WELL INSTALLATION

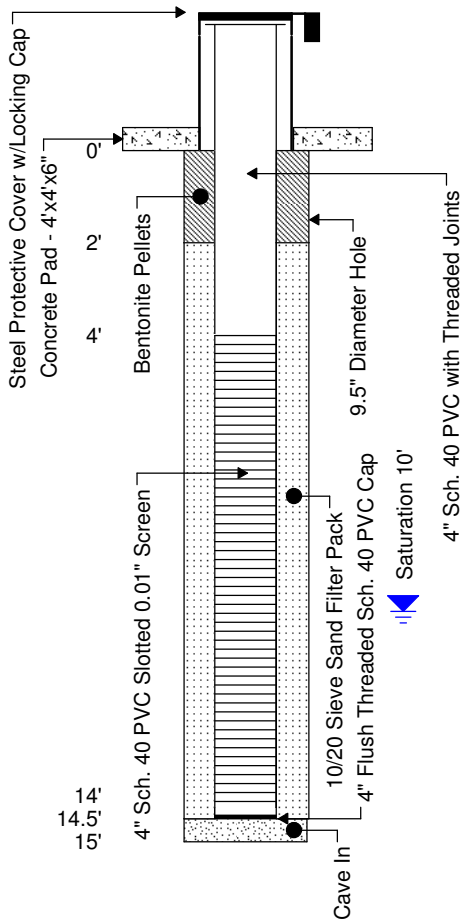
Well No.: MKTF-05
Start Date: 11/12/2013
Finish Date: 11/12/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.282' W 108°25.739'; Boring ID - SB06

Total Depth: 15' bgl
Ground Water: Saturated @ 10' bgl
Elev., TOC (ft. msl): 6942.22
Elev., PAD (ft. msl): 6939.49
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,472.30 **E** 2,545,769.95

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	52.6			60	**Fill (Silty Clay/Gravel)** Low plasticity, firm, damp, brown, faint odor
3	180			100	**Silty Clay (CL)** Low plasticity, firm, damp, reddish brown, odor, calcareous
5	224			90	**Sandy Clay/Clayey Sand (CL/SC)** Low plasticity, fine grain, damp, dark brown, hydrocarbon odor, sand seams present
7	1202			90	**Sandy Clay/Clayey Sand (CL)** Similar to above
9	1228	10'		90	**Sandy Silty Clay (CL)** Low plasticity, soft, damp, dark brown, hydrocarbon odor
11	1525			90	**Sandy Clay (CL)** Similar to above, with moist to saturated sand seams, hydrocarbon odor
13	377			90	**Clayey Sand (SC)** Fine grain, loose to compact, saturated, hydrocarbon odor, dark brown
15					**Sandy Clay (CL)** Low plasticity, soft to firm, moist, dark brown, hydrocarbon odor
					Total Depth = 15' BGL

Completion Results



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WELL INSTALLATION

Well No.: MKTF-06
Start Date: 11/11/2013
Finish Date: 11/11/2013

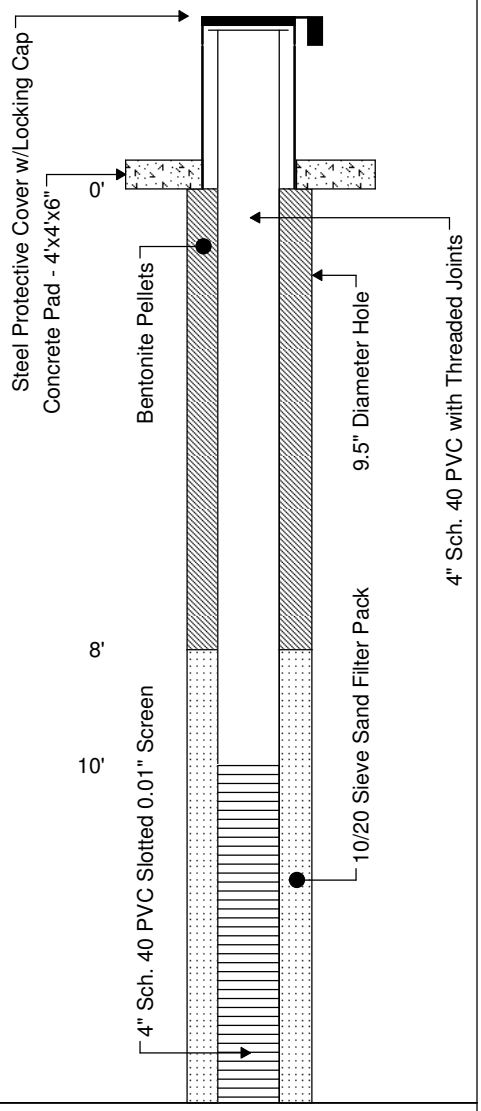
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 21' bgl
Ground Water: Saturated @ 17.5' bgl
Elev., TOC (ft. msl): 6946.81
Elev., PAD (ft. msl): 6944.24
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,556.28 **E** 2,545,811.85

Comments: N 35°29.295' W 108°25.732'; Boring ID - SB08

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	15.9			70	**Fill (Silt/Silty Clay)** Low plasticity, stiff, dry, light brown, no odor
3	228			60	**Fill (Silty Clay/Gravel)** Similar to above, dry, no odor
5	177			60	**Fill (Silty Clay)** Similar to above, damp, no odor
7	264			40	**Fill (Silty Clay)** Low plasticity, soft, damp, brown, gravel and wood debris
9				--	No recovery
11	90			10	**Fill (Silty Clay/Gravel)** Similar to above
13	660			100	**Sandy Silty Clay (CL)** Low plasticity, soft, damp to moist at base, brown, hydrocarbon odor
15					

Completion Results



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WELL INSTALLATION

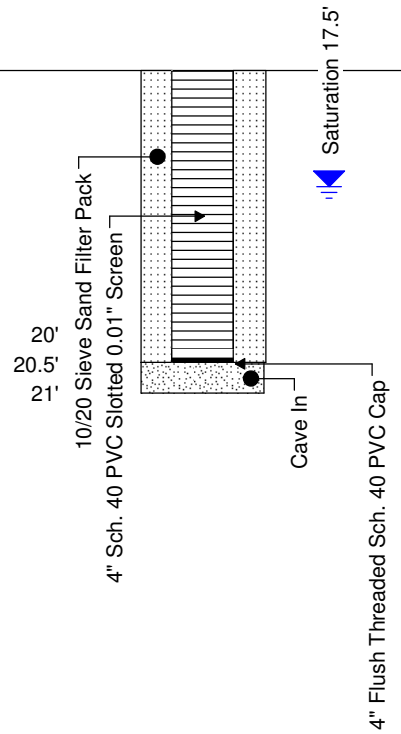
Well No.: MKTF-06
Start Date: 11/11/2013
Finish Date: 11/11/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.295' W 108°25.732'; Boring ID - SB08

Total Depth: 21' bgl
Ground Water: Saturated @ 17.5' bgl
Elev., TOC (ft. msl): 6946.81
Elev., PAD (ft. msl): 6944.24
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,556.28 **E** 2,545,811.85

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
	1115	17.5'		100	**Sandy Silty Clay (CL)** Similar to above, moist, oily, hydrocarbon odor
17				100	**Gravelly Sandy Clay (CL)** Low plasticity, firm, moist, oily, 1" gravel, strong hydrocarbon odor
19	225			100	**Clayey Gravel Sand (SC)** Fine to medium grain, loose, saturated, phase-separated hydrocarbon present, black, hydrocarbon odor
21					**Sandy Clay (CL)** Low plasticity, firm, moist, black hydrocarbon odor
23					Total Depth = 21' BGL
25					
27					
29					
31					
33					

Completion Results



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WELL INSTALLATION

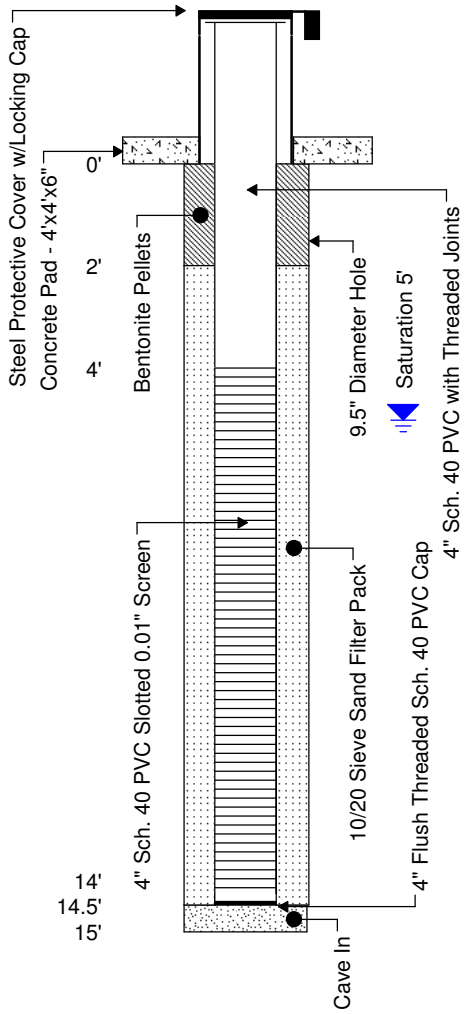
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.295' W 108°25.710'; Boring ID - SB10

Total Depth: 15' bgl
Ground Water: Saturated @ 5' bgl
Elev., TOC (ft. msl): 6947.18
Elev., PAD (ft. msl): 6944.40
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,555.11 **E** 2,545,885.42

Well No.: MKTF-07
Start Date: 11/11/2013
Finish Date: 11/11/2013

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	132			90	**Fill (Silty Clay)** Low plasticity, firm, dry to damp, brown, faint odor
3	235			90	**Fill (Clay/Sand/Gravel)** Damp, hydrocarbon odor
5	1202	5'		50	**Fill (Clay/Caliche Rock)** Odor
7	372			90	**Silty Sand (SM)** Fine grain, loose, saturated, phase-separated hydrocarbon, oily, brown to dark brown, hydrocarbon odor
					Silty Sand (SM) Similar to above, saturated
					Silty Clay (CL) Low plasticity, firm, damp, brown, hydrocarbon odor
11				--	No recovery
15					Total Depth = 15' BGL

Completion Results



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WELL INSTALLATION

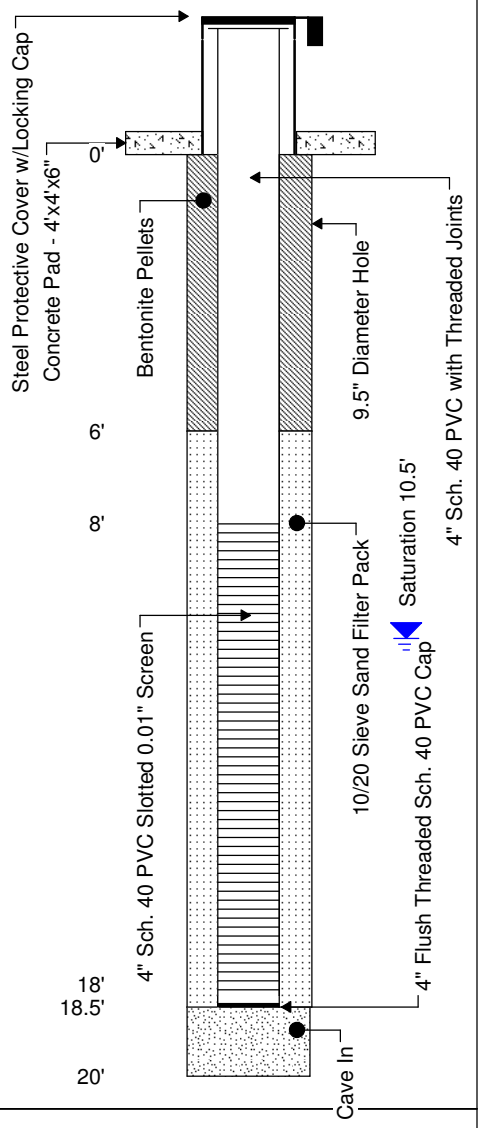
Well No.: MKTF-08
Start Date: 11/11/2013
Finish Date: 11/11/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.302' W 108°25.716'; Boring ID - SB11

Total Depth: 20' bgl
Ground Water: Saturated @ 10.5' bgl
Elev., TOC (ft. msl): 6947.09
Elev., PAD (ft. msl): 6944.02
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,598.94 **E** 2,545,885.02

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	85			90	**Fill (Silty Clay/Gravel)** Low plasticity, firm, dry to damp, odor
3	273			80	**Fill (Silty Clay/Gravel)** Similar to above
5	86			90	**Clay (CH)** High plasticity, stiff, damp, brown with light brown pockets of silt, odor
7	308			90	**Silty Clay (CL)** Low plasticity, soft/crumbly, dry to damp, brown, hydrocarbon odor
9	1126			80	**Silty Clay (CL)** Low plasticity, soft, damp, brown, hydrocarbon odor
11	789	10.5'		80	**Silty Clay (CL)** Similar to above, moist
13	558			90	**Silty Clay (CL)** Medium grain, loose, saturated, phase-separated hydrocarbon, hydrocarbon odor, brown
					Sandy Silty Clay (CL) Low plasticity, soft to firm, moist, hydrocarbon odor
15					**Sandy Clay (CL)** Low plasticity, soft to compact, saturated, phase-separated hydrocarbon, hydrocarbon odor
17					
19					
					Total Depth = 20' BGL

Completion Results



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WELL INSTALLATION

Well No.: MKTF-09
Start Date: 11/11/2013
Finish Date: 11/11/2013

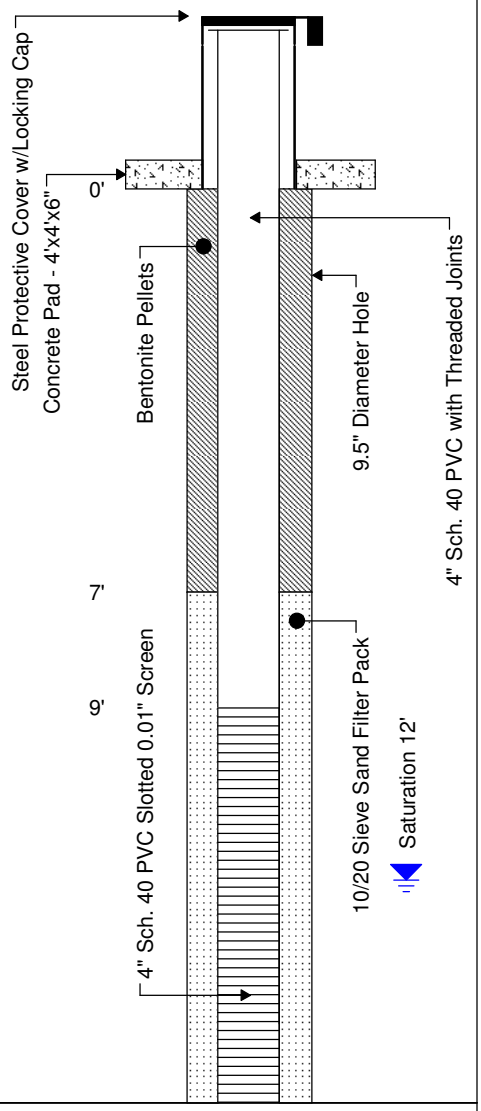
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 22' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): 6946.50
Elev., PAD (ft. msl): 6943.57
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,681.33 **E** 2,545,895.93

Comments: N 35°29.316' W 108°25.715'; Boring ID - SB13

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	21.9			90	**Fill (Silty Clay)** Low plasticity, stiff, dry to damp, no odor, brown
3	32.7			90	**Fill (Silty Clay)** Similar to above, gravel
5	36.1			90	**Silty Clay (CL)** Low plasticity, soft, damp, brown, faint odor
7	37			90	**Silty Clay (CL)** Similar to above
9	533			90	**Silty Clay (CL)** Similar to above **Sandy Clay (CL)** Similar to above, increase in sand and moisture
11	314	12'		90	**Sandy Clay (CL)** Similar to above, moist, hydrocarbon odor, dark brown
13	651			90	**Sandy Clay/Clayey Sand (CL/SC)** Fine to medium grain, compact, moist to saturated, hydrocarbon odor
15	587				**Sandy Clay/Clayey Sand (CL/SC)** Similar to above, saturated, sheen observed on split spoon, black, hydrocarbon odor

Completion Results



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WELL INSTALLATION

Well No.: MKTF-09
Start Date: 11/11/2013
Finish Date: 11/11/2013

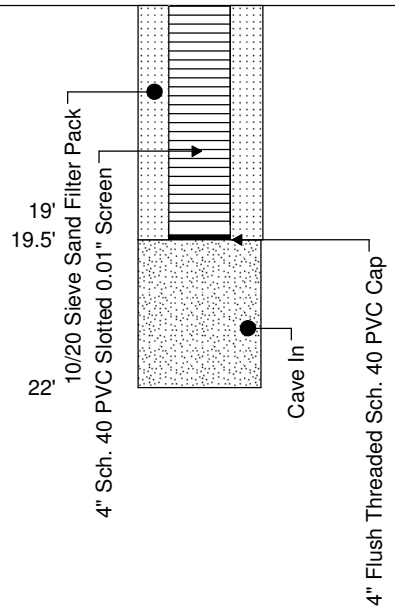
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 22' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): 6946.50
Elev., PAD (ft. msl): 6943.57
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,681.33 **E** 2,545,895.93

Comments: N 35°29.316' W 108°25.715'; Boring ID - SB13

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
17, 19, 21, 23, 25, 27, 29, 31, 33				90	**Sandy Clay/Clayey Sand (CL/SC)** Fine to medium grain, compact, saturated, sheen observed on split spoon, black, hydrocarbon odor
					Total Depth = 22' BGL

Completion Results



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WELL INSTALLATION

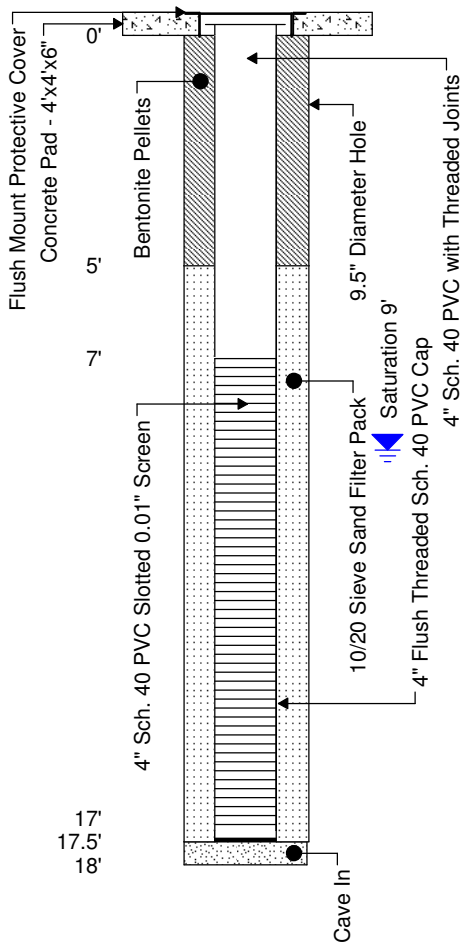
Well No.: MKTF-10
Start Date: 10/31/2013
Finish Date: 10/31/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.336' W 108°25.724'; Boring ID SB16

Total Depth: 18' bgl
Ground Water: Saturated @ 9' bgl
Elev., TOC (ft. msl): 6937.16
Elev., PAD (ft. msl): 6937.51
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,807.47 **E** 2,545,853.54

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	90			90	**Fill (Silt/Gravel)** Low plasticity, loose, dry, light brown
3	14			90	**Fill (Silty Clay/Gravel)** Similar to above
5	431			90	**Silty Clay (CL)** Low plasticity, stiff, dry, reddish brown, odor, calcareous
7	448			60	**Sand (SP)** Fine grain, loose, dry, reddish brown, odor
9	654	9'		60	**Sand (SP)** Similar to above, saturated at 9' bgl, phase-separated hydrocarbon, hydrocarbon odor
11	1559			90	**Clayey Sand (SC)** Fine grain, soft, saturated, phase-separated hydrocarbon, brown to black, hydrocarbon odor
13	713			90	**Clayey Sand/Sandy Clay (SC/CL)** Low plasticity, firm to stiff, moist to saturated, hydrocarbon odor, dark brown
					Total Depth = 18' BGL

Completion Results



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WELL INSTALLATION

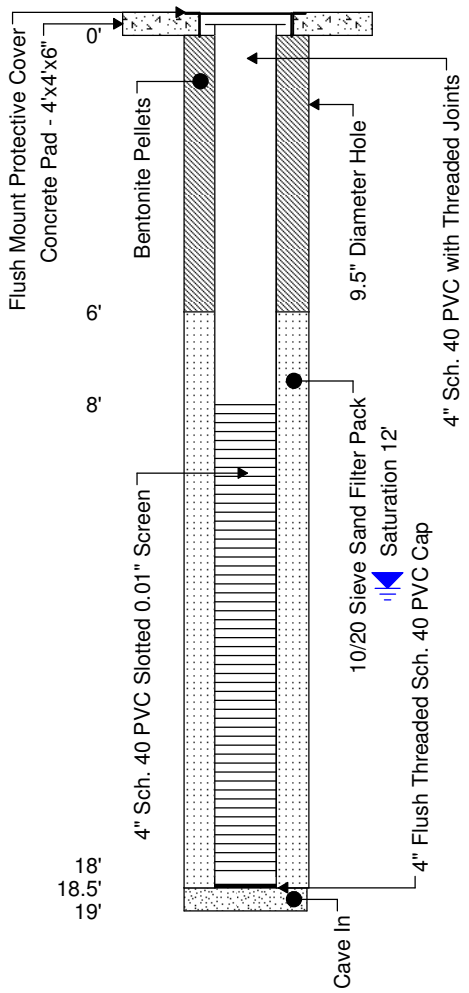
Well No.: MKTF-11
Start Date: 10/31/2013
Finish Date: 10/31/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.336' W 108°25.739'; Boring ID - SB17

Total Depth: 19' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): 6931.34
Elev., PAD (ft. msl): 6931.61
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,806.93 **E** 2,545,754.77

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-1					Ground Surface
1	14			60	**Fill (Silty Clay/Gravel)** Low plasticity, stiff, dry, light brown
3	36			70	**Fill (Silty Clay)** Similar to above
5	80			90	**Silty Clay (CL)** Low plasticity, firm, damp, brown, calcareous
7	125			80	**Silty Clay (CL)** Similar to above
9	1259			80	**Silty Clay (CL)** Low plasticity, firm, damp, oily, hydrocarbon odor, dark brown
11	860	12'		70	**Silty Clay (CL)** Similar to above, moist, hydrocarbon odor, oily, phase-separated hydrocarbon
13	1716			60	**Sandy Clay (CL)** Low plasticity, soft, moist to saturated, hydrocarbon odor, dark brown
15	1050			70	**Silty Sand (SM)** Medium grain, loose, saturated, hydrocarbon odor, dark brown to black
17					**Sandy/Silty Clay (CL)** Low plasticity, firm, saturated, dark brown to black, hydrocarbon odor
19					Total Depth = 19' BGL
21					

Completion Results



RPS
1250 S. Capital of Texas Hwy., Bldg. 3, Suite 200
Austin, Texas 78746

512/347-7588
512/347-8243

WELL INSTALLATION

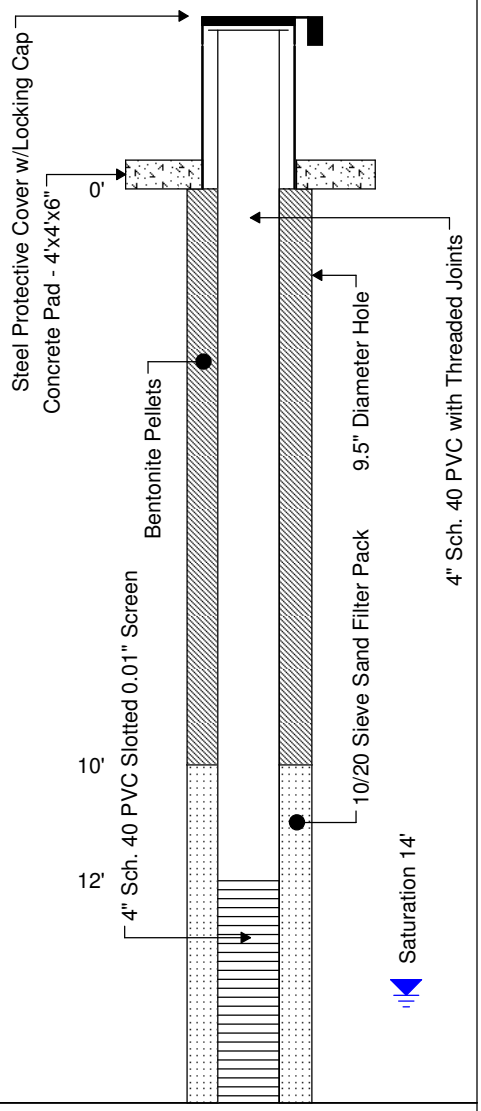
Well No.: MKTF-12
Start Date: 11/7/2013
Finish Date: 11/7/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.294' W 108°25.754'; Boring ID - SB19

Total Depth: 23' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): 6942.11
Elev., PAD (ft. msl): 6939.70
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,542.07 **E** 2,545,688.29

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	8.7			90	**Silt/Gravel (ML)** Low plasticity, soft, dry/damp, no odor, brown
3	54			80	**Silt/Gravel (ML)** Similar to above
5	7			70	**Gravel/Silt (GW)** 1/2 to 1" gravel, loose, compact, dry, no odor
7	7.5			70	**Clayey Sandy Silt (ML)** Very fine grain, compact, dry to damp, brown, no odor
9	5.5			60	**Sandy Clay (CL)** Low plasticity, firm, damp, light brown, no odor
11	5.8			70	**Sandy Clay (CL)** Similar to above, brown, no odor
13	10	14'		70	**Sandy Clay (CL)** Similar to above
					Silty Sand (SM) Fine to medium grain, loose, damp, brown, no odor
15	225			50	**Sandy Clay (CL)** Low plasticity, firm, moist to saturated in sand seams, hydrocarbon odor, dark brown

Completion Results



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Austin, Texas 78746

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512/347-8243

WELL INSTALLATION

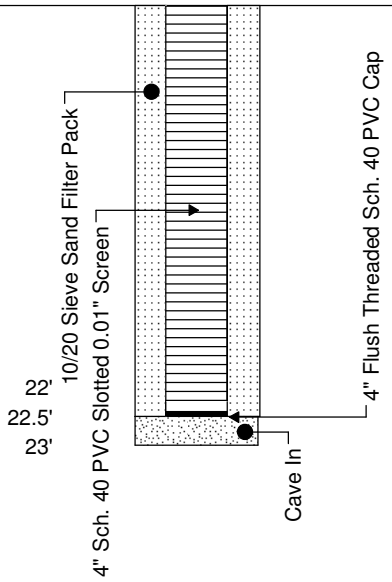
Well No.: MKTF-12
Start Date: 11/7/2013
Finish Date: 11/7/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.294' W 108°25.754'; Boring ID - SB19

Total Depth: 23' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): 6942.11
Elev., PAD (ft. msl): 6939.70
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,542.07 **E** 2,545,688.29

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
17	319			70	**Sandy Clay (CL)** Similar to above, moist, hydrocarbon odor
19	400			--	**Sandy Clay (CL)** Similar to above, moist, hydrocarbon odor
21	532			--	**Sandy Clay/Clayey Sand (CL)** Very fine grain, compact, moist to saturated, sheen observed in split spoon, hydrocarbon odor
23					Total Depth = 23' BGL
25					
27					
29					
31					
33					

Completion Results



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512/347-8243

WELL INSTALLATION

Well No.: MKTF-13
Start Date: 11/12/2013
Finish Date: 11/12/2013

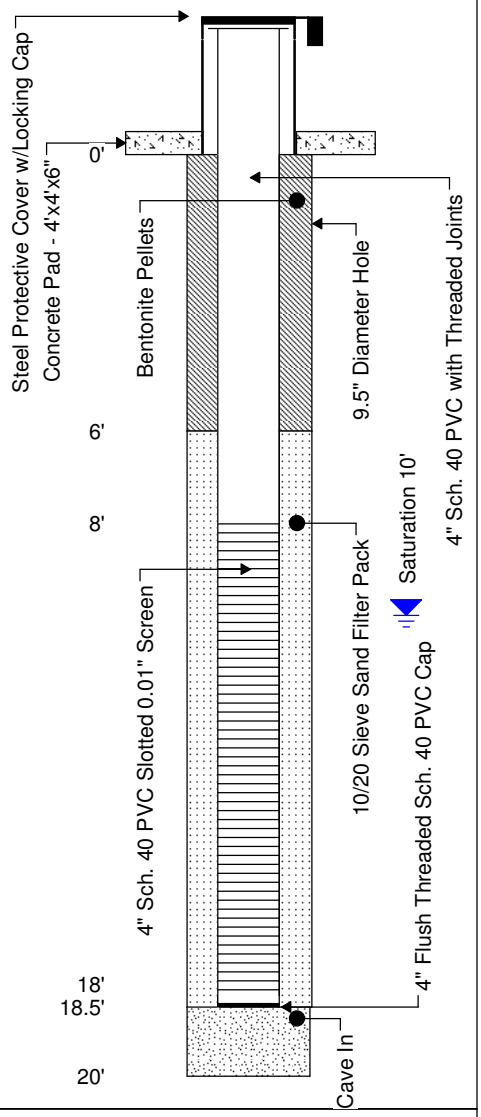
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 20' bgl
Ground Water: Saturated @ 10' bgl
Elev., TOC (ft. msl): 6935.18
Elev., PAD (ft. msl): 6933.67
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,625.25 **E** 2,545,697.39

Comments: N 35°29.307' W 108°25.755'; Boring ID - SB20

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	8			90	**Silt (ML)** Low plasticity, soft, damp, brown, no odor
3	12.7			90	**Silt (ML)** Similar to above, trace gravel
5	13			80	**Sandy Clay (CL)** Low plasticity, stiff, dry, brown, calcareous
7	17			90	**Silty Sand/Sandy Silt (SM/ML)** Very fine grain, loose to compact, dry, calcareous, brown
9	59	10'		90	**Sandy Silt (ML)** Similar to above, no odor
11	1165			90	**Sandy Clay/Clayey Sand (SC/CL)** Medium grain, compact, moist to saturated, hydrocarbon odor, brown
13	1200			90	**Clayey Sand (SC)** Similar to above, saturated, hydrocarbon odor
					Total Depth = 20' BGL

Completion Results



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Sheet: **1 of 1**

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WELL INSTALLATION

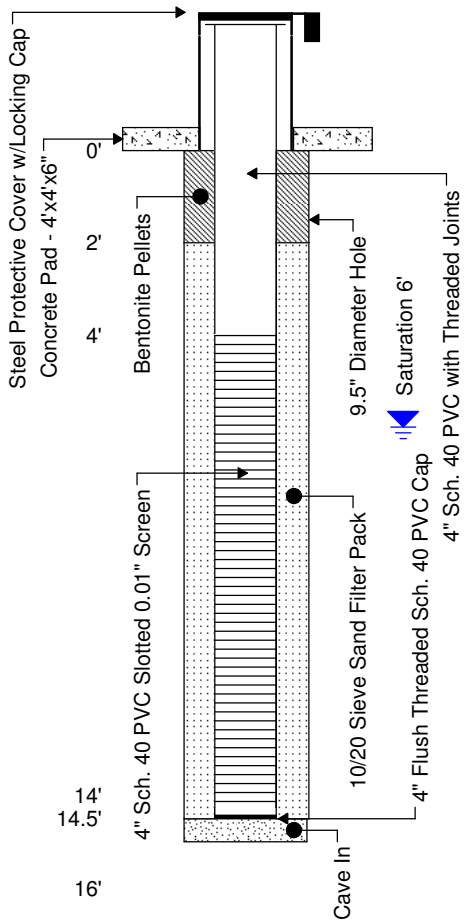
Well No.: MKTF-14
Start Date: 11/12/2013
Finish Date: 11/12/2013

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.323' W 108°25.769'; Boring ID SB22

Total Depth: 15' bgl
Ground Water: Saturated @ 6' bgl
Elev., TOC (ft. msl): 6928.02
Elev., PAD (ft. msl): 6925.65
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,719.43 **E** 2,545,625.96

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	18			20	**Silty Clay (CL)** Low plasticity, soft, damp, brown
3	308			90	**Silty Clay (CL)** Similar to above, odor
5	793	6'		90	**Sandy Clay (CL)** Low plasticity, firm, moist, oily, brown, trace gravel
7	504			90	**Clayey Sand (SC)** Medium grain, loose to compact, saturated, phase-separated hydrocarbon, hydrocarbon odor, black
9	760			90	**Clayey Sand (SC)** Similar to above
11					
13					
15					Total Depth = 15' BGL
17					
19					

Completion Results



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Sheet: **1 of 1**

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512/347-8243

WELL INSTALLATION

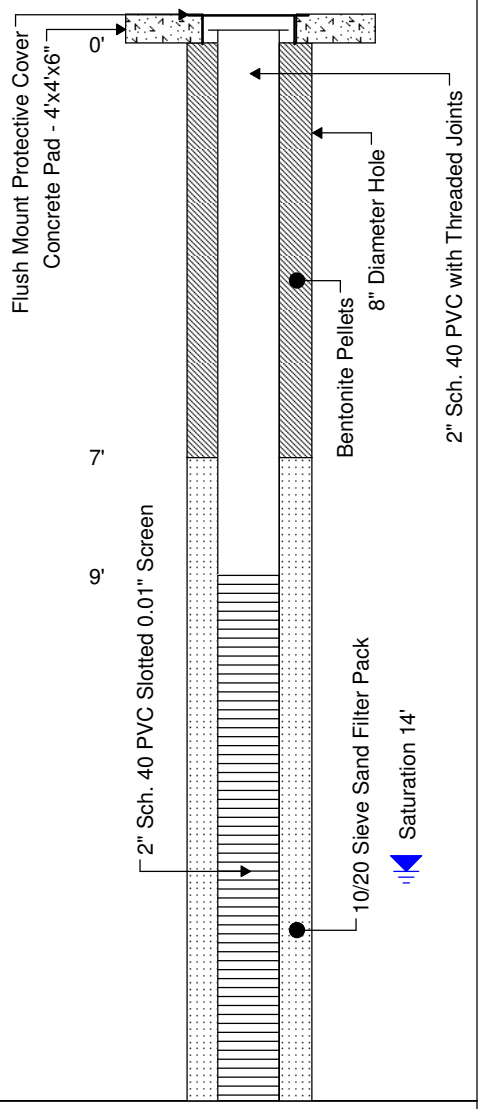
Well No.: MKTF-15
Start Date: 10/29/2013 09:30
Finish Date: 10/29/2013 12:15

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.343' W 108°25.708'; Boring ID - SB31

Total Depth: 22' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): 6943.48
Elev., PAD (ft. msl): 6943.74
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,845.57 **E** 2,545,934.58

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-1					Ground Surface
1	6.7			0	**Fill (Clay and Gravel)** No recovery
3	14.6			90	**Fill (Clay and Gravel)** Reddish brown
5				90	**Fill (Clay and Gravel)** Similar to above, no odor
7	823			90	**Fill (Silty Clay)** Reddish brown, hydrocarbon odor
9	1004			90	**Silty Sandy Clay (CL)** Low plasticity, firm to soft, damp, reddish brown, hydrocarbon odor
11	293			70	**Silty Sand (SM)** Fine grain, compact, damp, light reddish brown, no odor
13	221	14'		80	**Sand (SP)** Similar to above, odor, moist to very moist
15				80	**Sand (SP)** Fine to medium grain, loose, saturated, brown, hydrocarbon odor, phase-separated hydrocarbon present
17				60	**Sandy Silt (ML)** Low plasticity, very soft, damp to moist, brown, hydrocarbon odor

Completion Results



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512/347-8243

WELL INSTALLATION

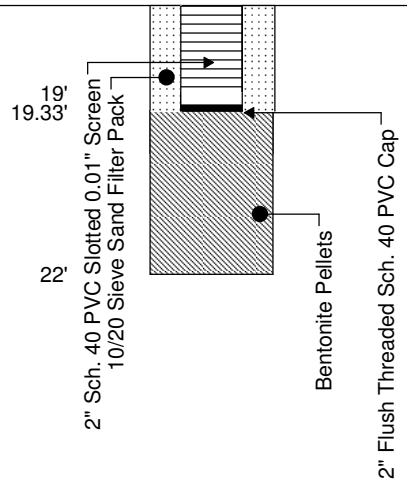
Well No.: MKTF-15
Start Date: 10/29/2013 09:30
Finish Date: 10/29/2013 12:15

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.343' W 108°25.708'; Boring ID - SB31

Total Depth: 22' bgl
Ground Water: Saturated @ 14' bgl
Elev., TOC (ft. msl): 6943.48
Elev., PAD (ft. msl): 6943.74
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,845.57 **E** 2,545,934.58

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Sandy Silt/Silty Sand (ML/SM) Fine grain, loose to compact, moist to saturated, hydrocarbon odor, dark brown to black
19				90	**Sandy Silt/Silty Sand (ML/SM)** Similar to above, saturated in silty sand lenses, hydrocarbon odor
21				90	**Silty Clay (CL)** Low plasticity, firm, damp, brown, faint odor
					Silty Clay (CL) Similar to above, odor
23					Total Depth = 22' BGL
25					
27					
29					
31					
33					
35					

Completion Results



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512/347-8243

WELL INSTALLATION

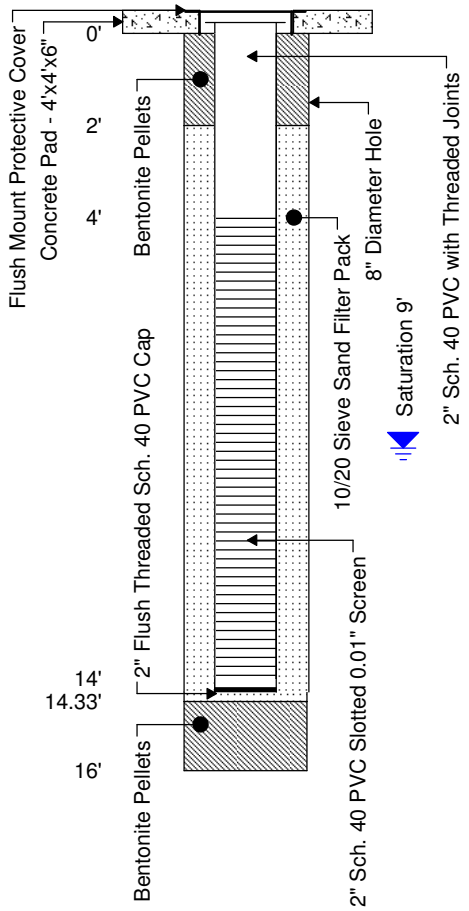
Well No.: MKTF-16
Start Date: 11/7/2013 08:40
Finish Date: 11/7/2013 11:00

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.323' W 108°25.680'; Boring ID - SB32

Total Depth: 16' bgl
Ground Water: Saturated @ 9' bgl
Elev., TOC (ft. msl): 6950.58
Elev., PAD (ft. msl): 6951.00
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,718.14 **E** 2,546,068.55

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1				0	**Fill (Clay/Gravel)** No recovery
3	469			10	**Fill (Clay/Gravel)** Similar to above
5				0	**Fill (Clay/Gravel)** Similar to baove
7				0	**Fill (Clay/Gravel)** Similar to above
9	1445	9'		90	**Fill (Clay/Gravel)** Saturated at 9' bgl, black discoloration, hydrocarbon odor
11	1255			90	**Gravelly Sand (SW)** High plasticity, firm, damp, dark brown, hydrocarbon odor
13	1412			40	**Clayey Sand (SC)** Similar to above, hydrocarbon odor
15	439			80	**Clayey Sand (SC)** Moderate plasticity, firm, damp, brown, hydrocarbon odor
					Total Depth = 16' BGL

Completion Results



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512/347-8243

WELL INSTALLATION

Well No.: MKTF-17
Start Date: 11/14/2013 13:00
Finish Date: 11/14/2013 15:00

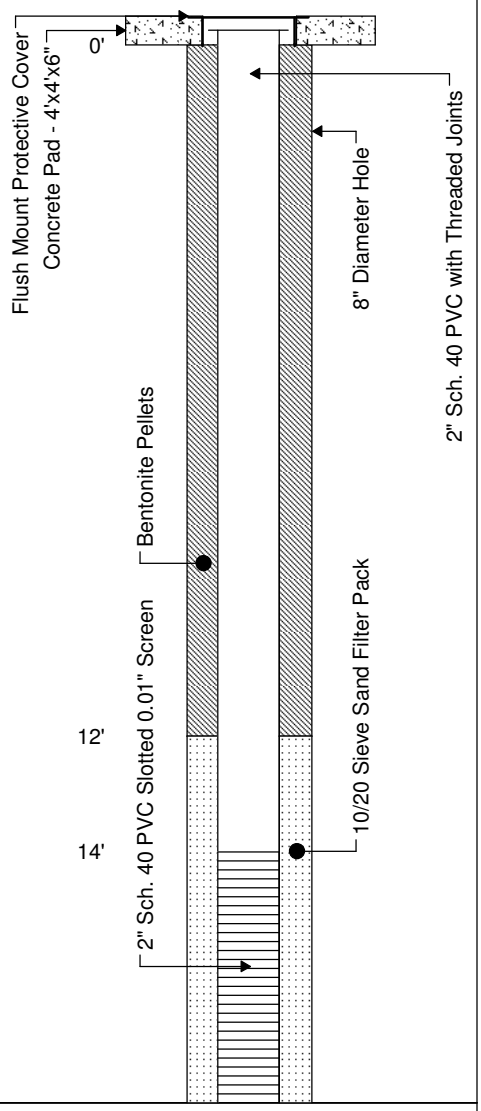
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 25' bgl
Ground Water: Saturated @ 20' bgl
Elev., TOC (ft. msl): 6945.76
Elev., PAD (ft. msl): 6945.79
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,268.93 **E** 2,545,850.73

Comments: N 35°29.248' W 108°25.724'; Boring ID - SB33

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-1					Ground Surface
1				10	**Fill (Asphalt/Base/Clay)** Low plasticity, soft, damp, brown
3	150			10	**Fill (Clay)** Similar to above
5	157			90	**Fill (Sand/Gravel/Clay)** Moist to very moist, reddish brown, no odor
7	92.1			20	**Fill (Sand/Gravel/Clay)** Similar to above, saturated, odor
9	65.9			90	**Clay (CH)** High plasticity, firm, damp, faint odor, brown
11	17			60	**Clay (CH)** Similar to above
13	55			70	**Clay (CH)** High plasticity, soft, damp, dark brown and black, odor
15	17.5			60	**Clay (CH)** Similar to above, faint odor
17	11.3			10	**Clay (CH)** Similar to above, trace fine grain sand

Completion Results



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1250 S. Capital of Texas Hwy., Bldg. 3, Suite 200
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512/347-8243

WELL INSTALLATION

Well No.: MKTF-17
Start Date: 11/14/2013 13:00
Finish Date: 11/14/2013 15:00

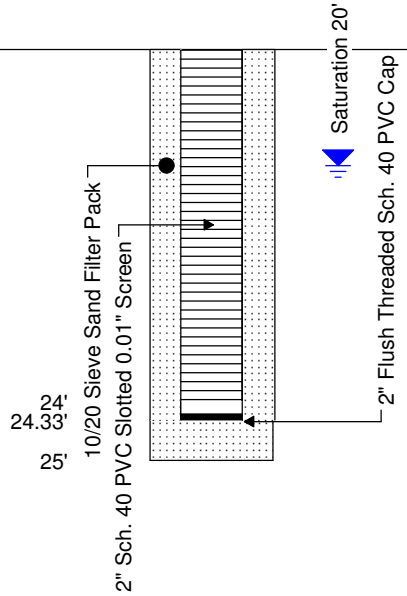
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 25' bgl
Ground Water: Saturated @ 20' bgl
Elev., TOC (ft. msl): 6945.76
Elev., PAD (ft. msl): 6945.79
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,268.93 **E** 2,545,850.73

Comments: N 35°29.248' W 108°25.724'; Boring ID - SB33

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
	17.2	20'		10	**Clay (CH)** High plasticity, soft, damp, brown
20	17.5			70	**Sandy Clay (CH)** Moderate plasticity, soft, very moist to saturated in sand seams
22				80	**Silty Clayey Gravel (GM)** Compact to loose, medium grain sand to 1/4" gravel - angular, saturated, brown
24				90	**Clay (CH)** Moderate plasticity, firm to stiff, damp, greenish gray
26					Total Depth = 25' BGL
28					
30					
32					
34					
36					

Completion Results



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512/347-7588
512/347-8243

WELL INSTALLATION

Well No.: MKTF-18
Start Date: 11/15/2013 10:00
Finish Date: 11/15/2013 15:00

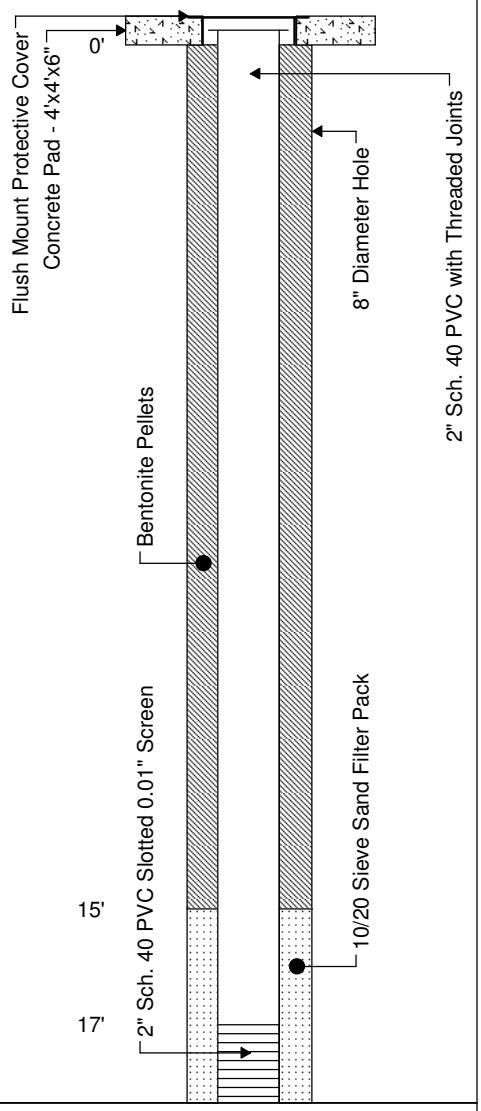
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 27' bgl
Ground Water: Saturated @ 23' bgl
Elev., TOC (ft. msl): 6950.65
Elev., PAD (ft. msl): 6950.97
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,497.53 **E** 2,546,006.29

Comments: N 35°29.288' W 108°25.692'; Boring ID - SB34

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-1					Ground Surface
1				--	**Fill (Gravel and Silty Clay)**
3	1009			20	**Fill (Gravel and Silty Clay)** Similar to above, strong hydrocarbon odor, damp
5	693			60	**Fill (Gravel and Silty Clay)** Similar to above
7	1108			70	**Fill (Silty Clay)** Low plasticity, firm, damp, brown, gravel present, strong hydrocarbon odor
9	901			90	**Fill (Clay/Sand/Gravel)** Similar to above, saturated, odor, sheen observed
11	803			60	**Clay (CH)** High plasticity, stiff, damp, brown, hydrocarbon odor
13	254			70	**Clay (CH)** Similar to above, very fine grain, sand in partings
15	200			30	**Clay (CH)** Similar to above
17				--	No recovery

Completion Results



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1250 S. Capital of Texas Hwy., Bldg. 3, Suite 200
Austin, Texas 78746

512/347-7588
512/347-8243

WELL INSTALLATION

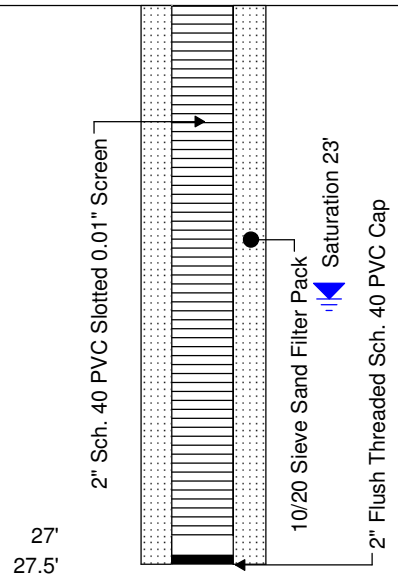
Well No.: MKTF-18
Start Date: 11/15/2013 10:00
Finish Date: 11/15/2013 15:00

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.288' W 108°25.692'; Boring ID - SB34

Total Depth: 27' bgl
Ground Water: Saturated @ 23' bgl
Elev., TOC (ft. msl): 6950.65
Elev., PAD (ft. msl): 6950.97
Elev., GL (ft. msl): --
Site Coordinates:
N 1,633,497.53 **E** 2,546,006.29

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
	112			30	**Clay (CH)** High plasticity, firm, damp, brown, faint odor
20	55			20	**Clay (CH)** Similar to above
22	323	23'		80	**Clay (CH)** Similar to above
					Sandy Clay/Clayey Sand (SC/CL) Fine grain, compact, very moist to saturated, brown, hydrocarbon present
24				90	**Clayey Sand (SC)** Similar to above, saturated
26					**Sandy Clay (CL)** Low plasticity, firm, damp, hydrocarbon odor, greenish gray
					Total Depth = 27' BGL
28					
30					
32					
34					
36					

Completion Results



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Austin, Texas 78746

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512/347-8243

WELL INSTALLATION

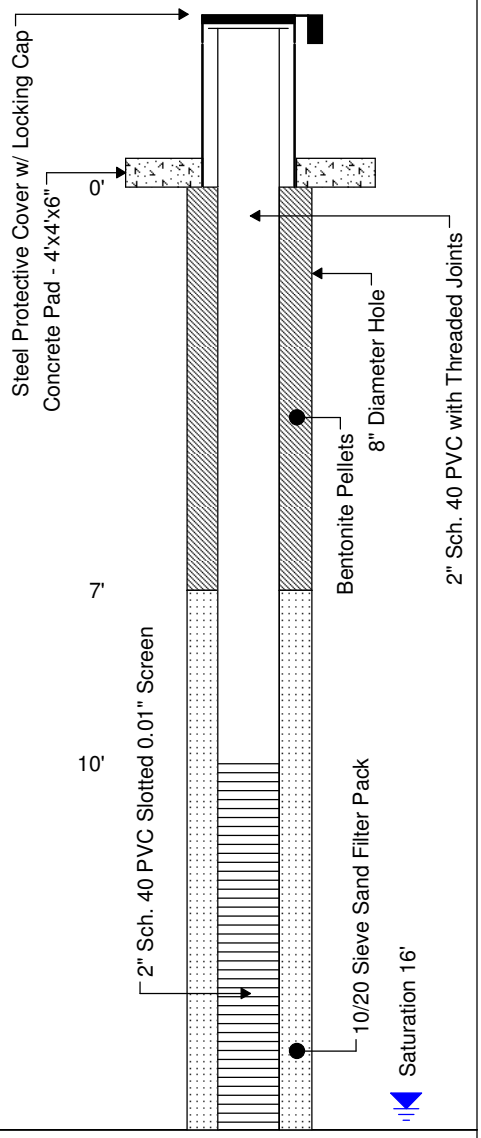
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.268' W 108°25.726'; Boring ID - SB35

Total Depth: 20' bgl
Ground Water: Saturated @ 16' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Well No.: MKTF-19
Start Date: 11/5/2013 08:50
Finish Date: 11/5/2013 11:20

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1				--	**Fill (Asphate/Base/Clay)** Odor
3	1178			50	**Fill (Silty Clay/Sandy Gravel)** Brown, strong hydrocarbon odor
5	1232			90	**Fill (Silty Clay/Sandy Gravel)** Similar to above, gray discoloration, strong hydrocarbon odor
7	120			80	**Clay (CH)** High plasticity, stiff, damp, brown, odor, calcareous, sampling tube is oily
9	375			70	**Clay (CH)** Similar to above, odor, oily
11	601			70	**Silty Sandy Clay (CL)** Moderate plasticity, firm, damp, brown, hydrocarbon odor, sampling tube is oily
13	1279			70	**Sandy Clay (CL)** Low plasticity, soft, damp to moist in sand seams, brown, strong hydrocarbon odor
15	249	16'		90	**Sandy Clay (CL)** Similar to above, hydrocarbon odor, tube is oily

Completion Results



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Austin, Texas 78746

512/347-7588
512/347-8243

WELL INSTALLATION

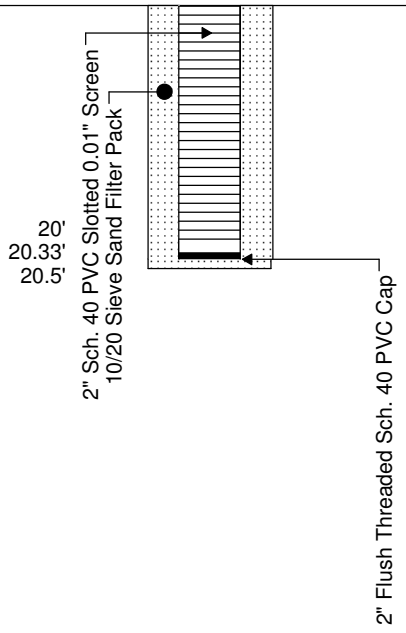
Well No.: MKTF-19
Start Date: 11/5/2013 08:50
Finish Date: 11/5/2013 11:20

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.268' W 108°25.726'; Boring ID - SB35

Total Depth: 20' bgl
Ground Water: Saturated @ 16' bgl
Elev., TOC (ft. msl): --
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): --
Site Coordinates:
N **W**

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
				90	**Silty Sand (SM)** Fine grain, loose, saturated, oily/phase-separated hydrocarbon, hydrocarbon odor, clay at base
18				90	**Silty Sand (SM)** Similar to above
20					Total Depth = 20' BGL
22					
24					
26					
28					
30					
32					
34					

Completion Results



RPS
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Austin, Texas 78746

512/347-7588
512/347-8243

WELL INSTALLATION

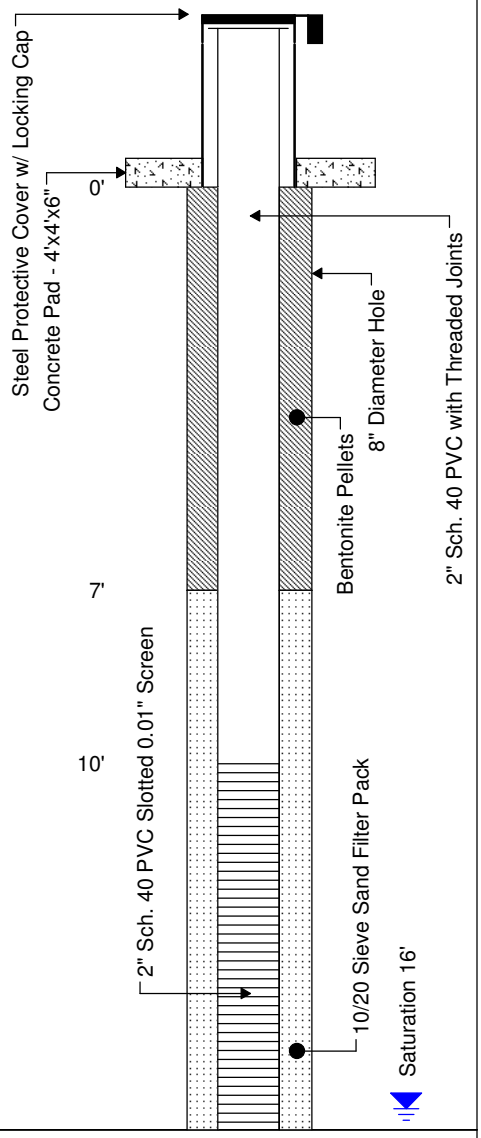
Well No.: MKTF-19
Start Date: 11/5/2013 08:50
Finish Date: 11/5/2013 11:20

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.268' W 108°25.726'; Boring ID - SB35

Total Depth: 20' bgl
Ground Water: Saturated @ 16' bgl
Elev., TOC (ft. msl): 6944.67
Elev., PAD (ft. msl): 6944.89
Elev., GL (ft. msl): 6944.34
Site Coordinates:
N 1633381.19 **E** 2545842.82

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1				--	**Fill (Asphalt/Base/Clay)** Odor
3	1178			50	**Fill (Silty Clay/Sandy Gravel)** Brown, strong hydrocarbon odor
5	1232			90	**Fill (Silty Clay/Sandy Gravel)** Similar to above, gray discoloration, strong hydrocarbon odor
7	120			80	**Clay (CH)** High plasticity, stiff, damp, brown, odor, calcareous, sampling tube is oily
9	375			70	**Clay (CH)** Similar to above, odor, oily
11	601			70	**Silty Sandy Clay (CL)** Moderate plasticity, firm, damp, brown, hydrocarbon odor, sampling tube is oily
13	1279			70	**Sandy Clay (CL)** Low plasticity, soft, damp to moist in sand seams, brown, strong hydrocarbon odor
15	249	16'		90	**Sandy Clay (CL)** Similar to above, hydrocarbon odor, tube is oily

Completion Results



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512/347-8243

WELL INSTALLATION

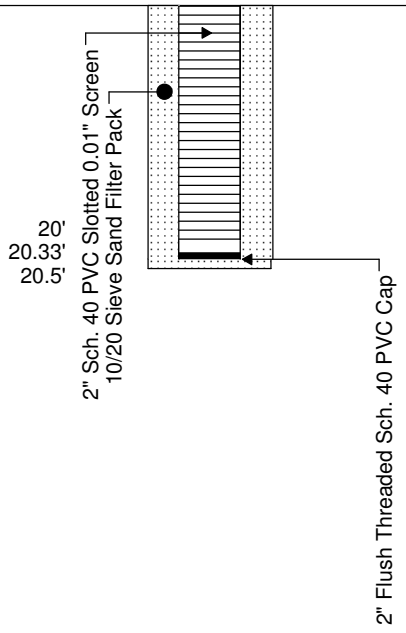
Well No.: MKTF-19
Start Date: 11/5/2013 08:50
Finish Date: 11/5/2013 11:20

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.268' W 108°25.726'; Boring ID - SB35

Total Depth: 20' bgl
Ground Water: Saturated @ 16' bgl
Elev., TOC (ft. msl): 6944.67
Elev., PAD (ft. msl): 6944.89
Elev., GL (ft. msl): 6944.34
Site Coordinates:
N 1633381.19 **E** 2545842.82

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
				90	**Silty Sand (SM)** Fine grain, loose, saturated, oily/phase-separated hydrocarbon, hydrocarbon odor, clay at base
18				90	**Silty Sand (SM)** Similar to above
20					Total Depth = 20' BGL
22					
24					
26					
28					
30					
32					
34					

Completion Results



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WELL INSTALLATION

Well No.: MKTF-20
Start Date: 2/10/2014
Finish Date: 2/10/2014

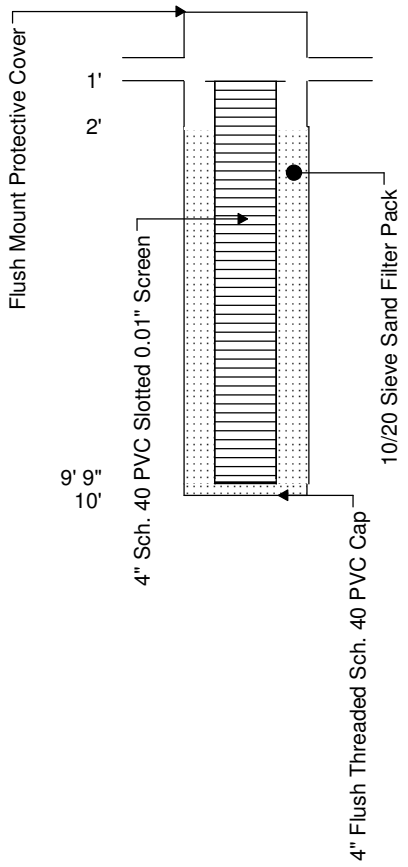
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Not Applicable
Driller: Western Refining Southwest, Inc.
Drilling Rig: Not Applicable
Drilling Method: Not Applicable
Sampling Method: Not Applicable

Total Depth: 10' bgl
Ground Water: 7.86' ft. BTOC
Elev., TOC (ft. msl): 6951.78
Elev., PAD (ft. msl): 6951.89
Elev., GL (ft. msl): 6951.17
Site Coordinates:
N 1633698.28 **E** 2546111.23

Comments: N 35°29.319' W 108°25.674'; Boring ID: Sump-N

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1					**Fill Material**
3					
5				--	
7					
9					
					Total Depth = 10' BGL
11					
13					
15					
17					
19					

Completion Results



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WELL INSTALLATION

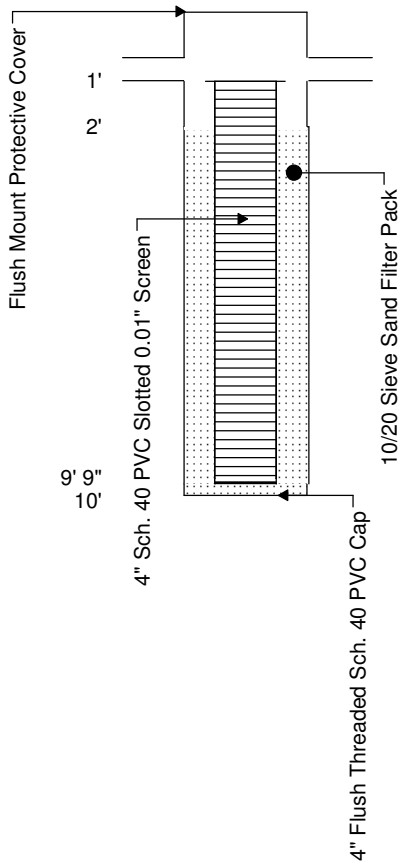
Well No.: MKTF-21
Start Date: 2/10/2014
Finish Date: 2/10/2014

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Not Applicable
Driller: Western Refining Southwest, Inc.
Drilling Rig: Not Applicable
Drilling Method: Not Applicable
Sampling Method: Not Applicable

Total Depth: 10' bgl
Ground Water: 7.60' ft. BTOC
Elev., TOC (ft. msl): 6952.57
Elev., PAD (ft. msl): 6952.68
Elev., GL (ft. msl): 6952.00
Site Coordinates:
N 1633570.30 **E** 2546110.00

Comments: N 35°29.295' W 108°25.675'; Boring ID: Sump-S

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description	Completion Results
-3, -1, 1, 3, 5, 7, 9, 11, 13, 15, 17, 19					Ground Surface **Fill Material** Total Depth = 10' BGL	



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512/347-8243

WELL INSTALLATION

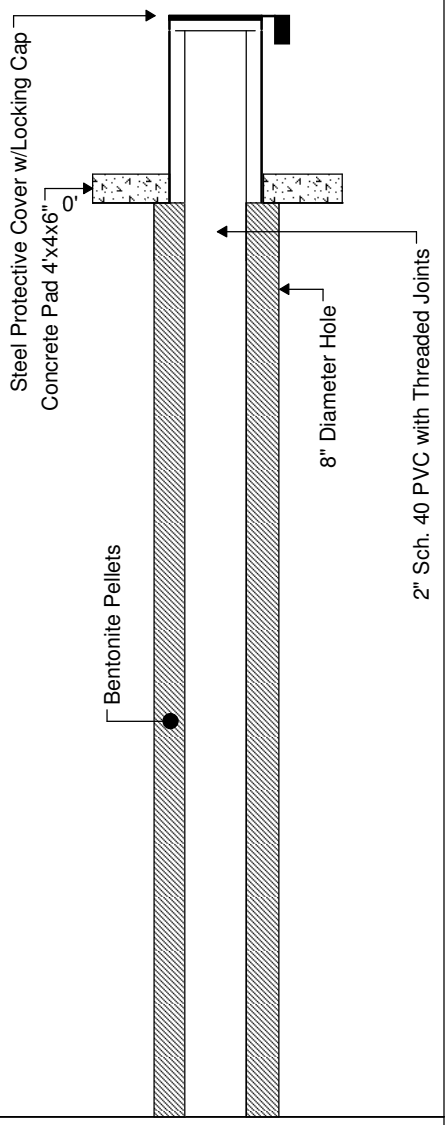
Well No.: MKTF-22
Start Date: 11/8/2013 12:15
Finish Date: 11/8/2013 15:30

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.288' W 108°25.802'; Boring ID - SB23

Total Depth: 32' bgl
Ground Water: Saturated @ 26' bgl
Elev., TOC (ft. msl): 6942.31
Elev., PAD (ft. msl): 6939.76
Elev., GL (ft. msl): 6938.57
Site Coordinates:
N 1633501.64 **E** 2545478.20

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	3.4			10	**Clayey Silt (ML)** Low plasticity, very fine grain, compact to loose, damp, tan, no odor
3	8.9			20	**Clayey Silt (ML)** Similar to above
5	7.0			20	**Clayey Silt (ML)** Similar to above
7	7.9			50	**Clayey Silt (ML)** Similar to above, light brown, no odor
9	6.4			40	**Clayey Silt (ML)** Low plasticity, stiff, damp, light brown, no odor
11	13.7			50	**Clayey Silt (ML)** Similar to above
13	12.7			10	**Clayey Silt (ML)** Similar to above, very stiff
15	10.1			70	**Clayey Silt (ML)** Very fine grain, stiff, damp, brown, no odor, becomes sandy at base

Completion Results



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512/347-7588
512/347-8243

WELL INSTALLATION

Well No.: MKTF-22
Start Date: 11/8/2013 12:15
Finish Date: 11/8/2013 15:30

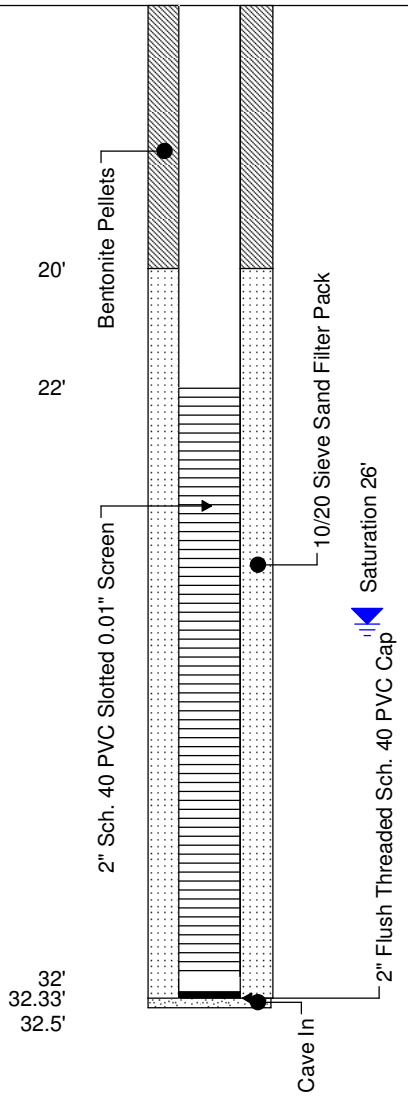
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.288' W 108°25.802'; Boring ID - SB23

Total Depth: 32' bgl
Ground Water: Saturated @ 26' bgl
Elev., TOC (ft. msl): 6942.31
Elev., PAD (ft. msl): 6939.76
Elev., GL (ft. msl): 6938.57
Site Coordinates:
N 1633501.64 **E** 2545478.20

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
17	13.2			10	**Silty Clay/Clayey Silt (CL)** Similar to above, increase in clay, damper, no odor
19	17.2			90	**Silty Clay (CL)** Low plasticity, firm, damp, brown, no odor
21	14.1			90	**Sandy Clay (CL)** Low plasticity, soft, damp, brown, no odor
23	43.1			90	**Sandy Clay (CL)** Similar to above, damp, faint odor
25	73.1	26'		90	**Sandy Clay (CL)** Similar to above, very moist in sand seams, hydrocarbon odor
27				90	**Silty Sand (SM)** Fine to medium grain, loose, saturated, brownish gray, hydrocarbon odor
29				90	**Clayey Silt (ML)** Very fine grain, soft, moist, dark brown, hydrocarbon odor
					Sand (SP) Fine to medium grain, loose, saturated, brown, odor
31				90	**Silty Clay (CL)** Low to moderate plasticity, firm, damp, brown and light olive/gray, no odor at base
33					**Silty Clay (CL)** Low plasticity, firm, damp, greenish gray, no odor

Total Depth = 32' BGL

Completion Results



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512/347-8243

WELL INSTALLATION

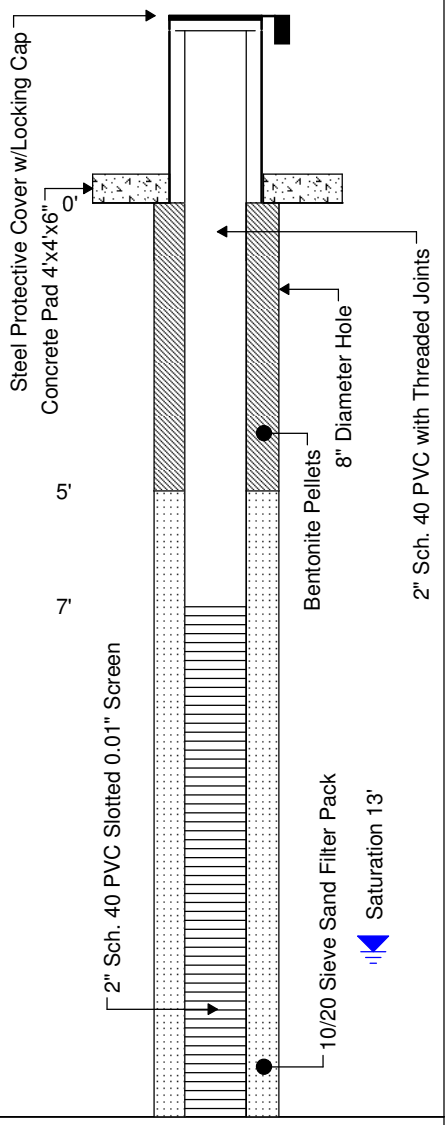
Well No.: MKTF-23
Start Date: 11/4/2013 14:00
Finish Date: 11/4/2013 16:00

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel
Comments: N 35°29.327' W 108°25.795'; Boring ID - SB25

Total Depth: 20' bgl
Ground Water: Saturated @ 13' bgl
Elev., TOC (ft. msl): 6929.98
Elev., PAD (ft. msl): 6927.23
Elev., GL (ft. msl): 6925.79
Site Coordinates:
N 1633750.93 **E** 2545503.70

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	10.3				**Silty Clay/Clayey Silt (ML/CL)** Low plasticity, firm, damp, brown, no odor
3	9.7			90	**Silty Clay/Clayey Silt (ML/CL)** Similar to above
5	13.4				**Silty Clay/Clayey Silt (ML/CL)** Similar to above
	21.9				**Clayey Silt (ML)** Low plasticity, soft, damp, brown, no odor
7	22			90	**Clayey Silt (ML)** Similar to above
9	29.1				**Clayey Sand (SC)** Very fine grain, compact, damp, brown, no odor
11	211	13'		80	**Clayey Sand (SC)** Similar to above, odor, moist
13	1022				**Clayey Sand (SC)** Fine grain, compact, moist to saturated in sand seam, hydrocarbon odor, phase-separated hydrocarbon present
15					

Completion Results



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512/347-8243

WELL INSTALLATION

Well No.: MKTF-23
Start Date: 11/4/2013 14:00
Finish Date: 11/4/2013 16:00

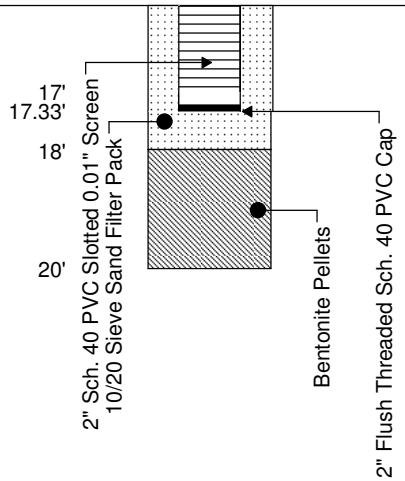
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Five-Foot Core Barrel

Total Depth: 20' bgl
Ground Water: Saturated @ 13' bgl
Elev., TOC (ft. msl): 6929.98
Elev., PAD (ft. msl): 6927.23
Elev., GL (ft. msl): 6925.79
Site Coordinates:
N 1633750.93 **E** 2545503.70

Comments: N 35°29.327' W 108°25.795'; Boring ID - SB25

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
	32.6				**Clay (CH)** High plasticity, stiff, damp, brown, no odor
17				90	
	28.9				
19					**Sandy Clay (CL)** Moderate plasticity, firm, damp, brown and gray, no odor
	22.7				
21					Total Depth = 20' BGL
23					
25					
27					
29					
31					
33					

Completion Results



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512/347-8243

WELL INSTALLATION

Well No.: MKTF-24
Start Date: 10/29/2013 13:15
Finish Date: 10/29/2013 16:15

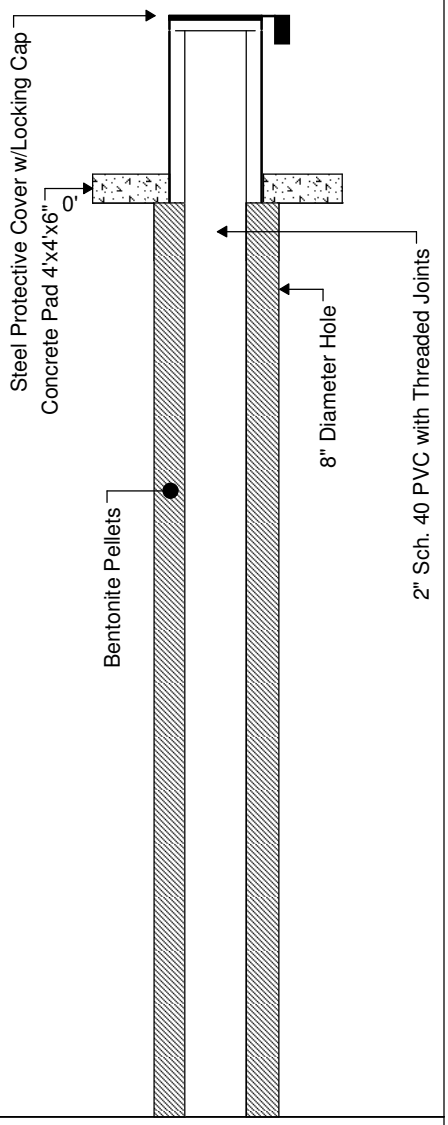
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 30' bgl
Ground Water: Saturated @ 20' bgl
Elev., TOC (ft. msl): 6928.72
Elev., PAD (ft. msl): 6926.07
Elev., GL (ft. msl): 6924.62
Site Coordinates:
N 1633853.19 **E** 2545468.48

Comments: N 35°29.342' W 108°25.800'; Boring ID - SB26

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	14.1			90	**Silt/Silty Sand (ML/SM)** Very fine to fine grain, loose, dry, brown
3	11.2			10	**Silty Sand (SM)** Fine grain, compact/very dense, damp, brown
5	12.5			90	**Silty Sandy Clay (CL)** Low plasticity, very dense, damp, brown
7	11.8			90	**Silty Sandy Clay (CL)** Similar to above
9	14.8			60	**Silty Sandy Clay (CL)** Similar to above
11	12.5			90	**Silty Sandy Clay (CL)** Similar to above
13	12.8			90	**Silty Sandy Clay (CL)** Similar to above
15	13.4			90	**Clay (CH)** High plasticity, firm, damp, brown, trace silt, no odor

Completion Results



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512/347-7588
512/347-8243

WELL INSTALLATION

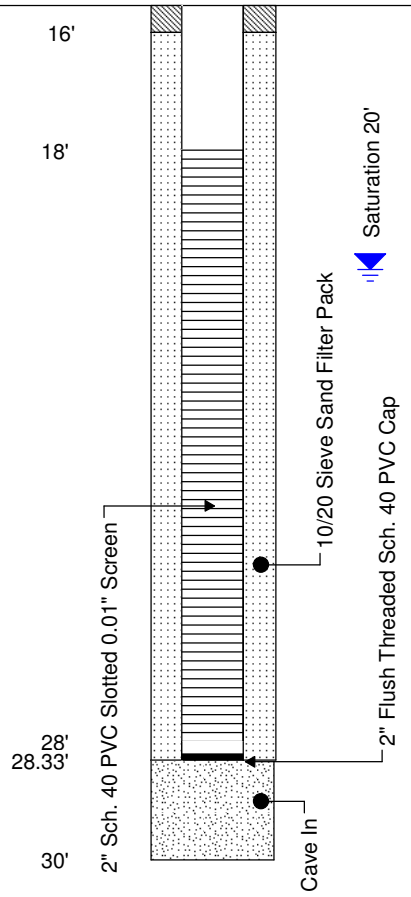
Well No.: MKTF-24
Start Date: 10/29/2013 13:15
Finish Date: 10/29/2013 16:15

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.342' W 108°25.800'; Boring ID - SB26

Total Depth: 30' bgl
Ground Water: Saturated @ 20' bgl
Elev., TOC (ft. msl): 6928.72
Elev., PAD (ft. msl): 6926.07
Elev., GL (ft. msl): 6924.62
Site Coordinates:
N 1633853.19 **E** 2545468.48

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
17	16.8			70	**Silty Sandy Clay (CL)** Low plasticity, firm, damp, brown, no odor
19	33.7	20'		90	**Sandy Clay (CL)** Low plasticity, soft, damp, brown, no odor
21	40.8			90	**Sandy Clay/Clayey Sand (CL/SC)** Fine grain, compact to soft, moist to saturated, brown, no odor
23				90	**Sandy Clay/Clayey Sand (CL/SC)** Similar to above, moist to saturated, no odor
25				90	**Sandy Clay/Clayey Sand (CL/SC)** Similar to above, moist to saturated, no odor
27				90	**Sandy Clay/Clayey Sand (CL/SC)** Similar to above, moist to saturated, greenish gray sand at base
29				90	**Silt/Siltstone (ML)** Low plasticity, very dense, dry, crumbly, brown/reddish brown, no odor
31					Total Depth = 30' BGL
33					

Completion Results



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512/347-8243

WELL INSTALLATION

Well No.: MKTF-25
Start Date: 10/30/2013 14:45
Finish Date: 10/30/2013 16:30

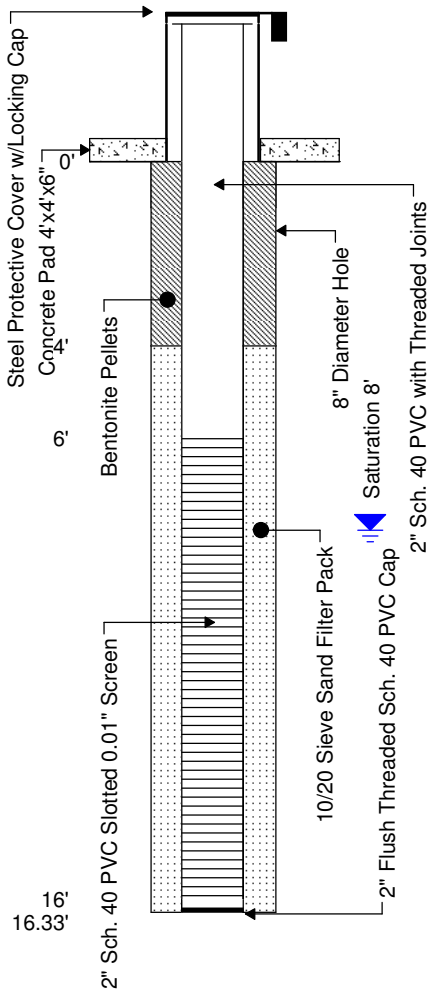
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon

Total Depth: 16' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): 6916.19
Elev., PAD (ft. msl): 6913.35
Elev., GL (ft. msl): 6911.79
Site Coordinates:
N 1634015.86 **E** 2545275.68

Comments: N 35°29.372' W 108°25.840'; Boring ID - SB28

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	10.9			60	**Fill (Silty Clay/Gravel)** Low plasticity, stiff, damp, brown, no odor
3	14.5			70	**Fill (Silty Clay/Gravel)** Similar to above
5	12.9			20	**Silty Clay (CL)** Low plasticity, stiff, damp, brown
7	14.5	8'		70	**Silty Clay (CL)** Similar to above
9	21.1			60	**Gravelly Sand (SW)** Fine to medium grain, loose, brown, saturated, odor
11				80	**Gravelly Sand (SW)** Fine to medium grain, compact, brown, very moist to saturated, odor
13				70	**Clayey Sand (SC)** Fine grain, compact, brown, moist to saturated in sand seams, odor
15				80	**Clayey Sand (SC)** Similar to above, odor
					Total Depth = 16' BGL

Completion Results



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512/347-8243

WELL INSTALLATION

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.373' W 108°25.796'; Boring ID - SB29

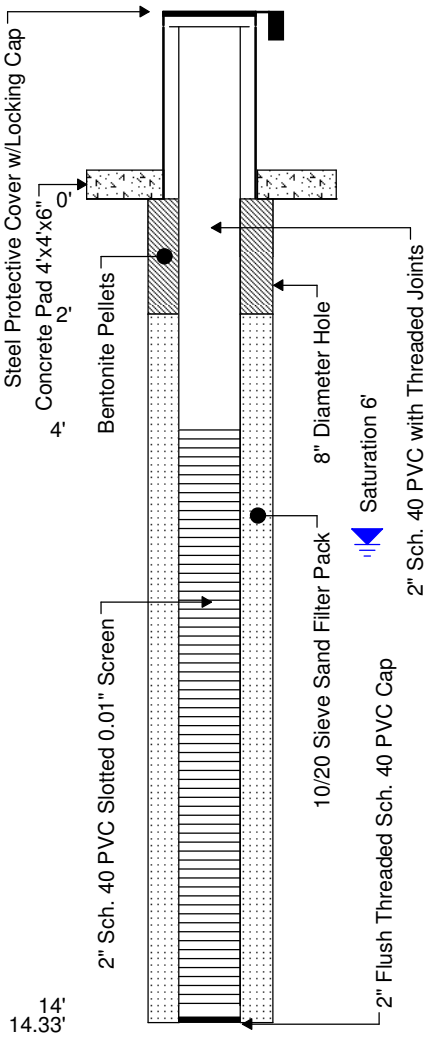
Total Depth: 14' bgl
Ground Water: Saturated @ 6' bgl
Elev., TOC (ft. msl): 6915.31
Elev., PAD (ft. msl): 6912.55
Elev., GL (ft. msl): 6911.35
Site Coordinates:
N 1634033.63 **E** 2545492.39

Well No.: MKTF-26
Start Date: 10/30/2013 10:40
Finish Date: 10/30/2013 12:00

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
					Ground Surface
1	17.5			80	**Silty Clay (CL)** Low plasticity, soft, damp, brown, no odor, trace small gravel
3	9.4			60	**Silty Clay (CL)** Similar to above
5	4.8			60	**Silty Clay (CL)** Similar to above
7	34.8	6'		90	**Sandy Clay/Clayey Sand (SC/CL)** Very fine grain, compact/soft, brown, moist, faint odor, saturated at base
9				70	**Sandy Clay (SC)** Low plasticity, stiff, damp, brown, no odor
11				60	**Silt/Siltstone (ML)** Low plasticity, very dense, dry, reddish brown, very fine grain sand in fissures, no odor
13				60	**Silt/Siltstone (ML)** Similar to above
					Total Depth = 14' BGL

-3
-1
15

Completion Results



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512/347-7588
512/347-8243

WELL INSTALLATION

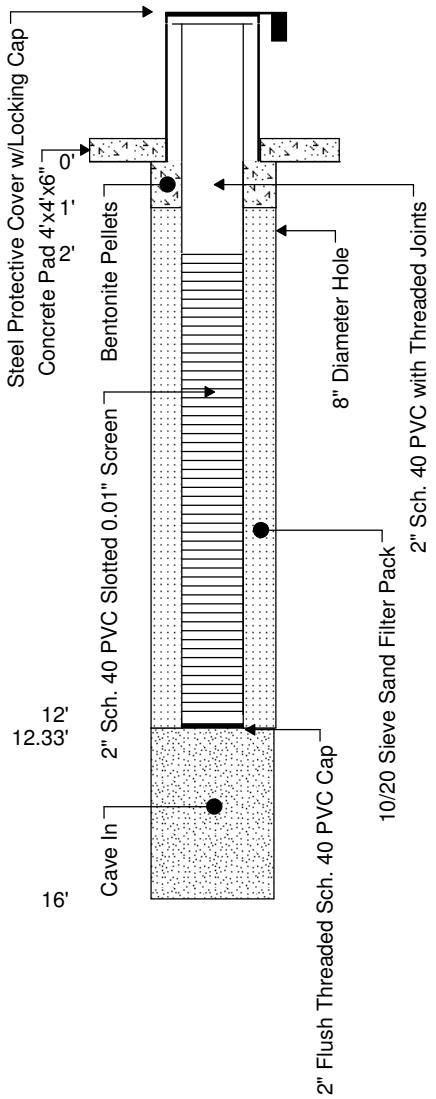
Well No.: MKTF-27
Start Date: 10/30/2013 09:00
Finish Date: 10/30/2013 10:20

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01809
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: Split Spoon
Comments: N 35°29.387' W 108°25.771'; Boring ID - SB30

Total Depth: 16' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): 6917.90
Elev., PAD (ft. msl): 6915.36
Elev., GL (ft. msl): 6914.18
Site Coordinates:
N 1634115.56 **E** 2545620.98

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	3.3			90	**Silty Clay (CL)** Low plasticity, firm, damp, brown, occasional gravel
3	4.1			80	**Silty Clay (CL)** Similar to above
5	2.4			90	**Silty Clay (CL)** Similar to above
7	4.1			90	**Silty Clay (CL)** Low to moderate plasticity, firm to soft, damp, brown, no odor, calcareous organics present
9	3.3			80	**Silt/Siltstone (ML)** Low plasticity, very dense, dry, reddish brown with greenish gray very fine grain sand in fissures, no odor
11	3.7			80	**Silt/Siltstone (ML)** Similar to above
13	4.5			80	**Silt/Siltstone (ML)** Similar to above
15	3.9			80	**Silt/Siltstone (ML)** Similar to above
17					Total Depth = 16' BGL
19					

Completion Results



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WELL INSTALLATION

Well No.: MKTF-28
Start Date: 4/2/2014 11:30
Finish Date: 4/2/2014 14:25

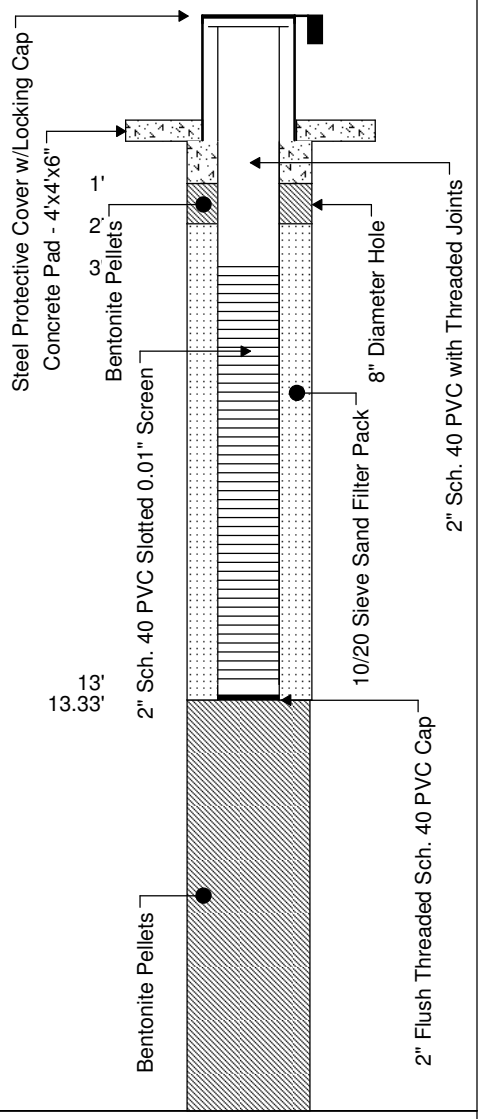
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 30' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): 6921.52
Elev., PAD (ft. msl): 6918.67
Elev., GL (ft. msl): 6917.51
Site Coordinates:
N 1634263.44 **E** 2545650.04

Comments: N 35°29.412' W 108°25.763', Air Temp: 48°F

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	2.6			90	**Fill (Silty Clay)** Low plasticity, soft, damp, brown, no odor, sandy at base, moist
3	5.0				
5	3.6				
7	7.6			60	**Silty Clay (CL)** Similar to above, damp to moist at 7.5' bgl
9	8.2				
11	8.1			60	**Silty Clay (CL)** Low plasticity, stiff, damp to dry, crumbly, brown, no odor
13	7.5				
15	9.1			60	**Silty Clay (CL)** Similar to above
17	5.5				
19	7.8				
21	3.5			60	**Silty Clay (CL)** Similar to above

Completion Results



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1250 S. Capital of Texas Hwy., Bldg. 3, Suite 200
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512/347-8243

WELL INSTALLATION

Well No.: MKTF-28
Start Date: 4/2/2014 11:30
Finish Date: 4/2/2014 14:25

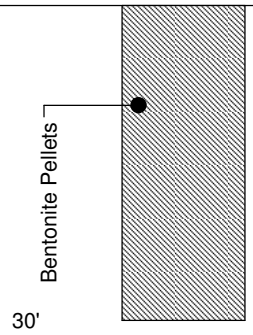
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 30' bgl
Ground Water: Not Encountered
Elev., TOC (ft. msl): 6921.52
Elev., PAD (ft. msl): 6918.67
Elev., GL (ft. msl): 6917.51
Site Coordinates:
N 1634263.44 **E** 2545650.04

Comments: N 35°29.412' W 108°25.763', Air Temp: 48°F

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
24	4.3				**Clay (CH)** High plasticity, very stiff, reddish brown and gray, no odor, crumbly
26	4.1				**Clay (CH)** Similar to above
28	3.3			60	
30					Total Depth = 30' BGL
32					
34					
36					
38					
40					
42					
44					
46					
48					

Completion Results



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WELL INSTALLATION

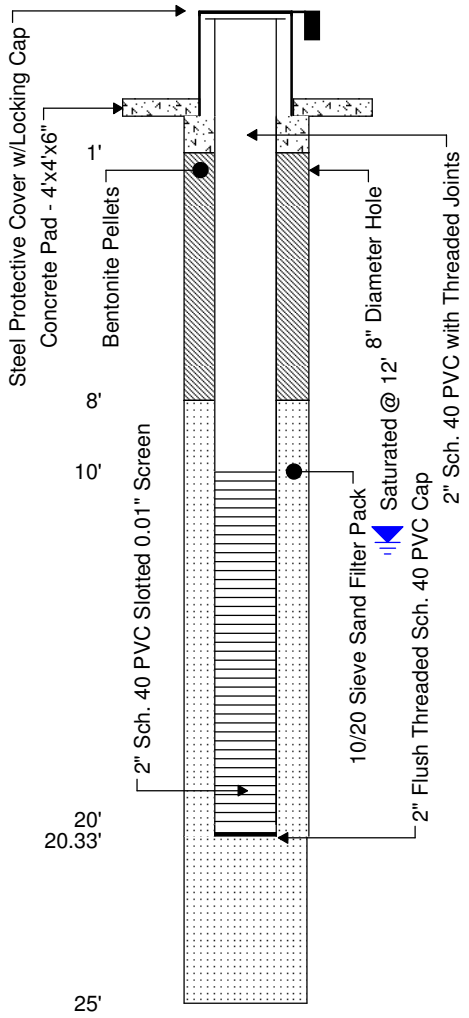
Well No.: MKTF-29
Start Date: 4/2/2014 08:30
Finish Date: 4/2/2014 11:15

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon
Comments: N 35°29.406' W 108°25.846', Air Temp: 41°F

Total Depth: 25' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): 6901.62
Elev., PAD (ft. msl): 6898.83
Elev., GL (ft. msl): 6897.67
Site Coordinates:
N 1634249.76 **E** 2545258.34

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3, -1					Ground Surface
1	2.2			95	**Silty Clay (CL)** Low plasticity, firm, damp, brown, no odor
3	3.9				
5	3.1				
7	1.3			95	**Silty Clay (CL)** Similar to above, no odor
9	4.4				
11	2.4				**Silty Clay (CL)** Similar to above, no odor
13	2.9	12'		60	**Clayey Sand (SC)** Fine grain, compact, saturated, brown, no odor
15	2.8				**Clayey Sand (SC)** Similar to above, saturated
17	2.7			60	
19	1.0				**Clay (CH)** High plasticity, very stiff, dry, damp, reddish brown/gray, no odor
21	1.0			90	**Clay (CH)** Similar to above, no odor
23	1.2				
25					Total Depth = 25' BGL
27					

Completion Results



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WELL INSTALLATION

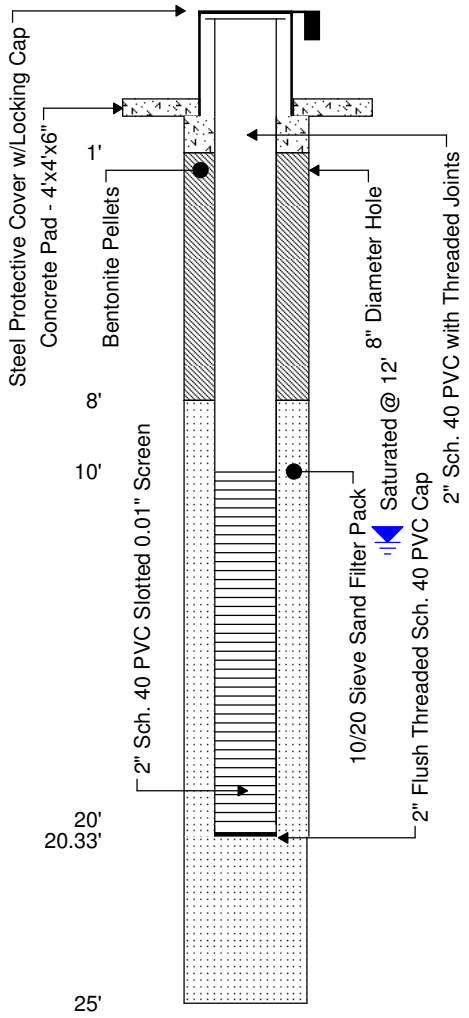
Well No.: MKTF-30
Start Date: 4/1/2014 13:00
Finish Date: 4/1/2014 15:00

Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon
Comments: N 35°29.405' W 108°25.910', Air Temp: 58°F

Total Depth: 25' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): 6900.80
Elev., PAD (ft. msl): 6898.10
Elev., GL (ft. msl): 6896.68
Site Coordinates:
N 1634225.67 **E** 2544937.91

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3, -1					Ground Surface
1, 3	12.3			30	**Fill (Silty Clay)** Low plasticity, firm, dry, brown, no odor
5, 7, 9	12.3, 13.2, 17.1			90	**Fill (Silty Clay)** Similar to above, dry, crumbly, no odor, sand at base
11, 13	18.5, 17.2	12'		80	**Silty Sand (SM)** Fine grain, compact to loose, moist to saturated at 12' bgl, brown, no odor, clayey at 14' bgl
15, 17, 19	13.1, 13.8			90	**Sandy Clay (CL)** Low plasticity, firm, damp, brown, no odor; **Clayey Sand (SC)** Very fine grain, compact, saturated, brown, no odor; **Sandy Clay (CL)** Low plasticity, firm, damp, brown, no odor
21, 23, 25, 27	9.1, 6.2			95	**Clay (CH)** Moderate to high plasticity, stiff, damp to dry, crumbly, brown/gray, no odor
					Total Depth = 25' BGL

Completion Results



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WELL INSTALLATION

Well No.: MKTF-31
Start Date: 4/1/2014 08:20
Finish Date: 4/1/2014 12:00

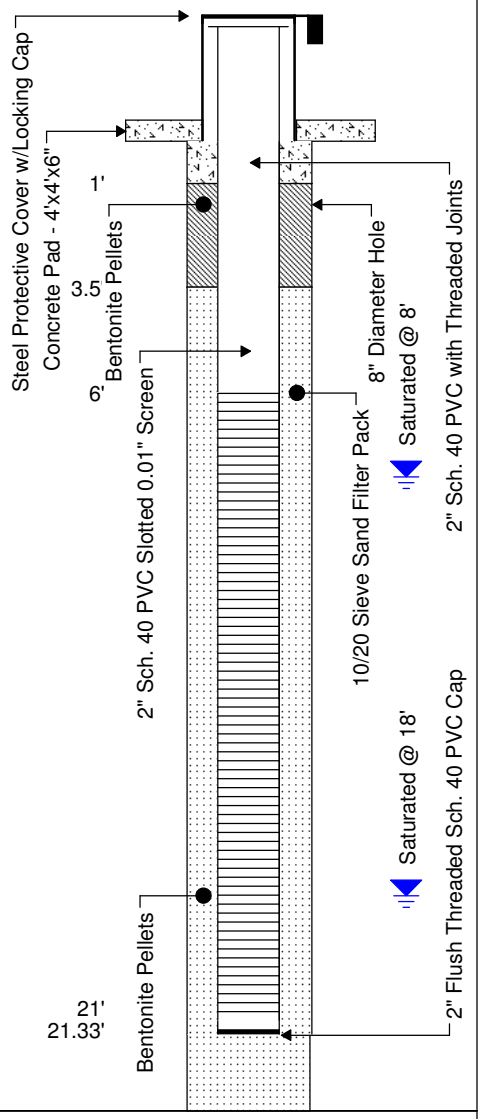
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 30' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): 6906.87
Elev., PAD (ft. msl): 6904.26
Elev., GL (ft. msl): 6903.11
Site Coordinates:
N 1633898.83 **E** 2544938.99

Comments: N 35°29.350' W 108°25.909', Air Temp: 48°F; Boring ID - SB20

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	2.0			90	**Fill (Silty Clay)** Low plasticity, firm, damp, brown, no odor, gravel throughout
3	2.7				
5	6.5				**Silty Clay (CL)** Low plasticity, firm, damp, brown, no odor
7	5.2	8'		70	**Clayey Sand (SC)** Very fine grain, compact, very moist at 6' bgl to saturated at 8' bgl, brown, no odor
9	4.8				
11				95	**Clayey Sand/Silty Sand (SC/SM)** Similar to above, saturated, brown, no odor
13	5.8				**Clay (CH)** High plasticity, stiff, damp, brown, no odor
15					
17	3.3	18'		95	**Sandy Clay (CL)** Low to moderate plasticity, firm, damp in sand seams, brown, no odor
19	4.6				**Clayey Sand (SC)** Very fine grain, compact, moist to saturated, brown, no odor
21	5.2			90	**Sandy Clay (CL)** Low to moderate plasticity, firm, damp in sand seams, brown, no odor

Completion Results



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1250 S. Capital of Texas Hwy., Bldg. 3, Suite 200
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512/347-7588
512/347-8243

WELL INSTALLATION

Well No.: MKTF-31
Start Date: 4/1/2014 08:20
Finish Date: 4/1/2014 12:00

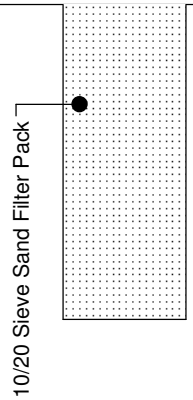
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 30' bgl
Ground Water: Saturated @ 8' bgl
Elev., TOC (ft. msl): 6906.87
Elev., PAD (ft. msl): 6904.26
Elev., GL (ft. msl): 6903.11
Site Coordinates:
N 1633898.83 **E** 2544938.99

Comments: N 35°29.350' W 108°25.909', Air Temp: 48°F; Boring ID - SB20

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
24	7.2				
26	2.5			90	**Clay (CH)** Moderate plasticity, firm, dry to damp, crumbly, reddish brown, no odor
28	2.3				
30					Total Depth = 30' BGL
32					
34					
36					
38					
40					
42					
44					
46					
48					

Completion Results



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WELL INSTALLATION

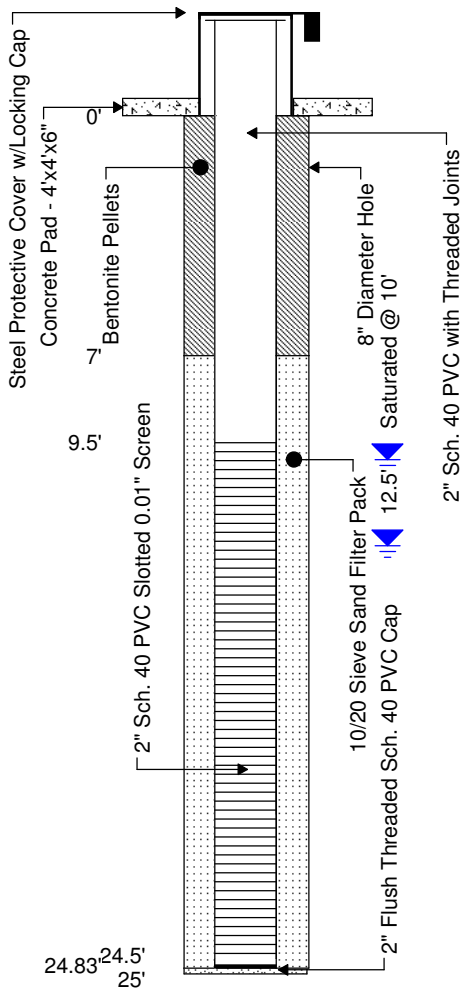
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon
Comments: N 35°29.275' W 108°25.928', Air Temp: 58°F

Total Depth: 25' bgl
Ground Water: Saturated @ 10' bgl
Elev., TOC (ft. msl): 6911.11
Elev., PAD (ft. msl): 6908.44
Elev., GL (ft. msl): 6907.16
Site Coordinates:
N 1633443.56 **E** 2544840.32

Well No.: MKTF-32
Start Date: 3/31/2014 14:40
Finish Date: 3/31/2014 16:30

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3, -1					Ground Surface
1, 3	16.3, 10.0			95	**Clayey Silt (ML)** Low plasticity, firm, dry, brown, no odor
5, 7	8.7, 10.1			100	**Clayey Silt/Silty Clay (ML/CL)** Low plasticity, firm, dry, brown, no odor
9	9.1, 13.6	10'			**Silty Clay (CL)** Similar to above, damp, no odor
11, 13	9.3, 10.9	12.5'		90	**Sandy Clay/Clayey Sand (SC/CL)** Low plasticity, very fine grain, brown, moist, saturated at 10-11', bgl and 12.5-13.5' bgl, no odor
15, 17, 19	10.6, 14.1			80	**Silty Clay/Clay (CH)** Moderate to high plasticity, firm to stiff, damp, brown, no odor
21, 23	12.6, 10.4			80	**Clay (CH)** Similar to above
25					**Sandy Clay (SC)** Moderate plasticity, firm, moist in sand seams, brown, no odor
27					**Silty Clay (CL)** Low plastiicty, stiff gray to greenish gray, gravelly at base, damp, no odor
					Total Depth = 25' BGL

Completion Results



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WELL INSTALLATION

Well No.: MKTF-33
Start Date: 4/3/2014 08:40
Finish Date: 4/3/2014 12:00

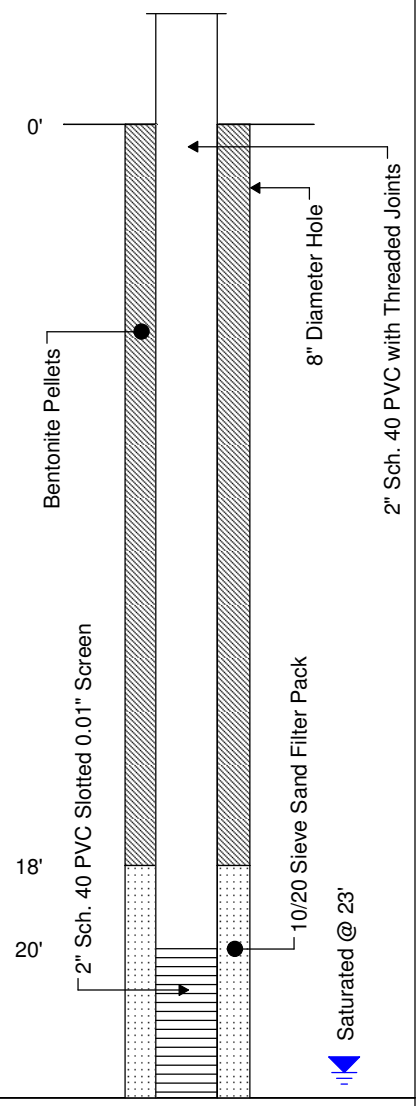
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 35' bgl
Ground Water: Saturated @ 23' bgl
Elev., TOC (ft. msl): 6939.75
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): 6936.59
Site Coordinates:
N 1633261.99 **E** 2545318.27

Comments: N 35°29.246' W 108°25.830', Air Temp: 30°F

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3, -1					Ground Surface
1	0.9				**Silty Clay (CL)** Low plasticity, firm, damp, brown, no odor
3	1.1			95	**Clayey Silt (ML)** Low plasticity, dense, dry, light brown, no odor, calcareous
5	2.1				
7	2.2			95	**Clayey Silt (ML)** Similar to above
9	2.8				
11	3.8				**Clayey Sand (SC)** Fine grain, loose to compact, dry, brown, no odor
13	3.7			60	
15	4.5				**Clay (CH)** High plasticity, very stiff, dry, brown, no odor
17	2.9			50	**Sand/Clayey Sand (SP/SC)** Fine grain, loose to compact, dry, brown, no odor
19					
21	2.5			90	**Sandy Clay/Clay (CL/CH)** High to moderate plasticity, stiff, damp, brown, no odor, sand seam at 21' bgl, saturated sand lense at 23' bgl
23	2.9	23'			

Completion Results



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WELL INSTALLATION

Well No.: MKTF-33
Start Date: 4/3/2014 08:40
Finish Date: 4/3/2014 12:00

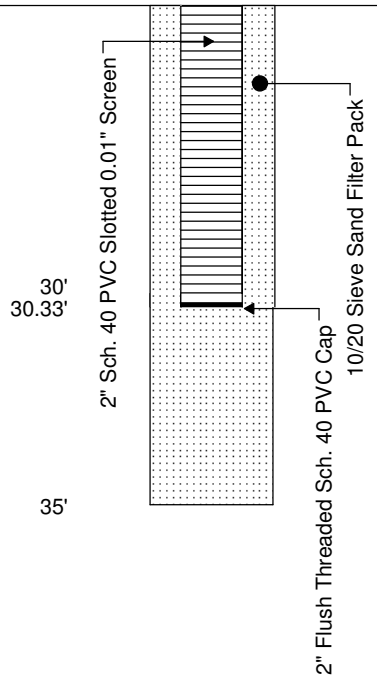
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 35' bgl
Ground Water: Saturated @ 23' bgl
Elev., TOC (ft. msl): 6939.75
Elev., PAD (ft. msl): --
Elev., GL (ft. msl): 6936.59
Site Coordinates:
N 1633261.99 **E** 2545318.27

Comments: N 35°29.246' W 108°25.830', Air Temp: 30°F

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
25	3.4				
27	1.6			90	**Clayey Sand/Sandy Clay (SC/CL)** Moderate plasticity, firm, moist to saturated throughout interval, brown, interbedded sand/clay, no odor
29	2.5				
31				95	**Clay (CH)** High plasticity, very stiff, brown, damp, no odor
35					Total Depth = 35' BGL

Completion Results



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WELL INSTALLATION

Well No.: MKTF-34
Start Date: 3/31/2014 11:00
Finish Date: 3/31/2014 13:45

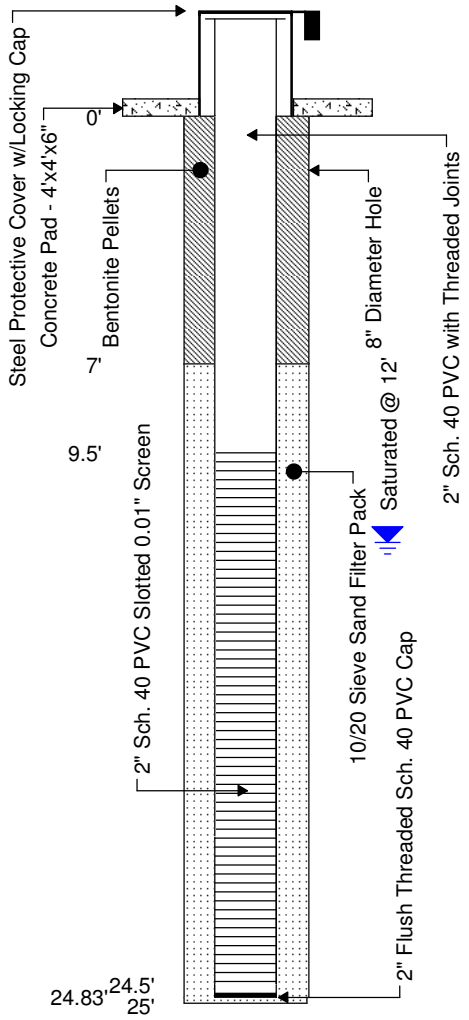
Client: Western Refining Southwest, Inc.
Site: Gallup Refinery - Seep West of Tank 102
Job No.: UEC01867
Geologist: Tracy Payne
Driller: Enviro-Drill, Inc.
Drilling Rig: CME 75
Drilling Method: Hollow Stem Augers
Sampling Method: 5-Foot Split Spoon

Total Depth: 25' bgl
Ground Water: Saturated @ 12' bgl
Elev., TOC (ft. msl): 6945.35
Elev., PAD (ft. msl): 6942.42
Elev., GL (ft. msl): 6943.52
Site Coordinates:
N 1633118.42 **E** 2545681.30

Comments: N 35°29.224' W 108°25.757', Air Temp: 49-51°F

Depth (ft.)	PID (ppm)	Saturation	USCS Class	Recovery (%)	Sample Description
-3					
-1					Ground Surface
1	13.6			95	**Silty Clay/Clayey Silt (CL/SM)** Low plasticity, soft, damp, brown, no odor, calcareous
3	7.8				
5	15.6				
7	12.1			60	**Clay (CH)** High plasticity, stiff, damp, brown, no odor
9	10.7				
11	12.3				**Sandy Clay (CL)** Moderate plasticity, firm, moist, brown, no odor
13	11.9	12'		60	**Clayey Sand (SC)** Similar to above, saturated, no odor
15	9.0				**Sandy Clay (CL)** Moderate plasticity, firm, moist, brown, no odor
17	8.1			90	**Silty Sandy Clay (CL)** Low to moderate plasticity, firm, damp, no odor
19	16.3				
21	13.4				
23	13.6			95	**Silty Clay (CL)** Similar to above, damp, no odor
25	15.8				
27	11.5				**Gravelly Clay (CL)** Low plasticity, firm, crumbly, damp, no odor, greenish gray
	11.7				
					Total Depth = 25' BGL

Completion Results



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512/347-8243

DiSorbo
Environmental Consulting Firm

Western Refining SW, Inc.
Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 18'
Ground Water	: 10'
Start Date	: 11/19/2014
Finish Date	: 11/19/2014

MKTF-35

(Sheet 1 of 1)

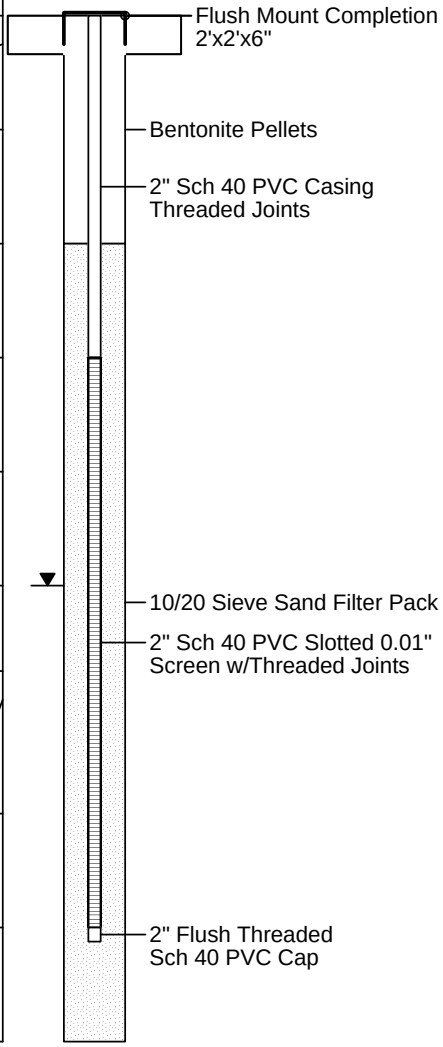
Elev., TOC (ft.msl)	: 6951.65
Elev., PAD (ft. msl)	: 6951.90
Elev., GL (ft. msl)	: 6951.25
Site Coordinates	:
N	: 1633204.45
E	: 2546011.60

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
-2							
-1							
0					100		ASPHALT/BASE,
1	4.5			CL	100		SILTY CLAY, low, very stiff, damp, brown,
2							
3	46.6			CL	20		SILTY CLAY, SIMILAR TO ABOVE (STA), odor, gravel present,
4							
5	95			CL/SP	90		SILTY CLAY/SAND/GRAVEL, low, damp, reddish brown, odor, very coarse grain sand, 1/4" to 1" gravel, odor,
6							
7	64			CL	80		SILTY CLAY, low, firm, damp, reddish brown, odor, occasional gravel,
8							
9	78			CL/SP	90		SILTY CLAY/SAND/GRAVEL, SIMILAR TO 4-6', damp to moist, odor,
10		▼					
11	1790			CL/SP	90		SILTY CLAY/SAND/GRAVEL, SIMILAR TO ABOVE (STA), saturated, hydrocarbon (hc) odor,
12				CL	90		SILTY CLAY, low, stiff, damp, reddish brown, light grey clay @ base, hc odor,
13	2400			CL/SC	90		SILTY CLAY/SANDY CLAY, low, firm to stiff, damp, grey, hc odor, sand/silt varies across interval,
14							
15	745			CL	50		SANDY GRAVELLY CLAY, STA, damp, grey, brown @ base, hc odor,
16							
17	37			CL	90		CLAY, mod, very stiff, damp, brown and grey, faint odor.
18							
19							

Completion Results

MKTF-35



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Houston, Texas 77002
713-955-1230

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Western Refining SW, Inc.
Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 16'
Ground Water	: 10'
Start Date	: 11/19/2014
Finish Date	: 11/19/2014

MKTF-36

(Sheet 1 of 1)

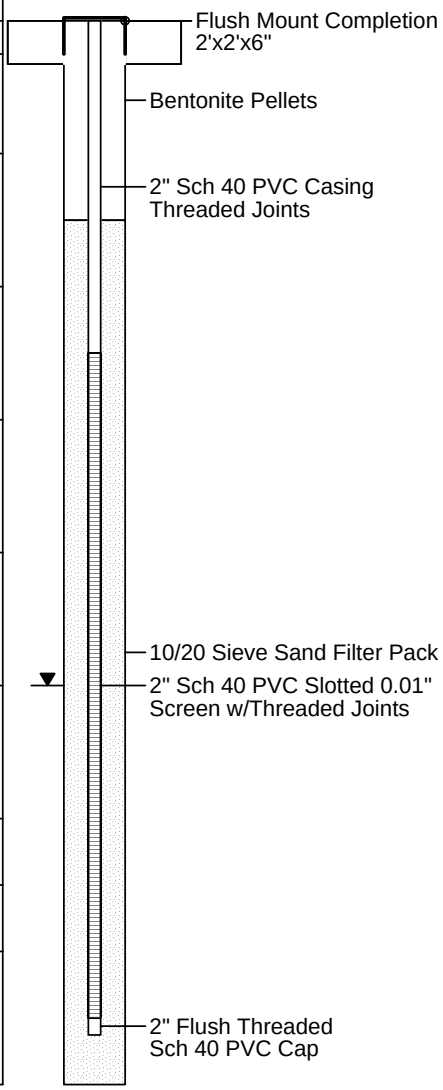
Elev., TOC (ft.msl)	: 6950.12
Elev., PAD (ft. msl)	: 6950.67
Elev., GL (ft. msl)	: 6949.87
Site Coordinates	:
N	: 1633349.47
E	: 2545982.58

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
-2							
-1							
0					100		ASPHALT/BASE,
1	812			CL	90		SANDY CLAY, low, stiff, dry, tan, no odor, gravel throughout,
2							
3	276			CL	60		SILTY CLAY, low, very stiff, dry, brown, hydrocarbon (hc) odor,
4							
5	1700			CL	60		SILTY CLAY, SIMILAR TO ABOVE (STA), trace sand/gravel, hc odor,
6							
7	2411			CL/SP	90		SILTY CLAY/SAND/GRAVEL, low, firm, damp, tan, very coarse sand, 1/4" to 1" gravel, hc odor, moist to very moist in seams,
8							
9	2278			CL/SP	90		SILTY CLAY/SAND/GRAVEL, STA, moist, fluid in top of sampling spoon, strong hc odor, trace phase separated hydrocarbon (psh),
10		▼					
11	1879			CL/SP	90		SILTY CLAY/SAND/GRAVEL, STA, saturated, psh,
12				CL/SP	90		SILTY CLAY/SAND/GRAVEL, STA, saturated, psh,
13	405			CL	90		SILTY CLAY, low, stiff, damp, brown, hc odor,
14							
15	450			CL	90		SILTY CLAY, STA, damp, hc odor.
16							

Completion Results

MKTF-36



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Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 24'
Ground Water	: 8'
Start Date	: 11/18/2014
Finish Date	: 11/18/2014

MKTF-37

(Sheet 1 of 1)

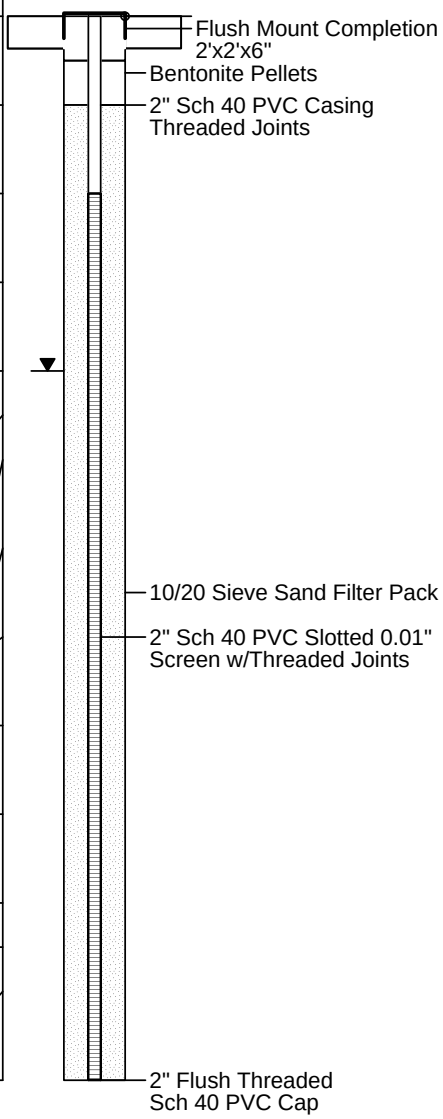
Elev., TOC (ft.msl)	: 6958.87
Elev., PAD (ft. msl)	: 6959.07
Elev., GL (ft. msl)	: 6958.62
Site Coordinates	:
N	: 1633291.89
E	: 2546216.67

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
1	69				40		ASPHALT/GRAVEL BASE, CLAY, very stiff, brown, damp, faint odor,
3	367			CL	50		SILTY CLAY, low, very stiff, brown, damp, odor, gravel present,
5	355			CL/SP	60		SILTY CLAY/SAND/GRAVELLY, low to firm, damp, brown with sand/gravel, odor,
7	1790			CL/SP	80		SILTY CLAY/SAND/GRAVELLY, SIMILAR TO ABOVE (STA), odor,
8		▼					
9	2140			CL	90		SILTY CLAY, low, soft, moist to very moist, brown, strong odor,
				SW/GW	90		SANDY GRAVEL/GRAVELLY SAND, coarse to very coarse grain, compact, very moist, odor, tan,
11	404			CL/SP	90		SILTY CLAY/SAND/GRAVEL, low to firm, damp, brown with coarse sand & gravel, odor,
13	454			CL	20		SANDY CLAY, low, soft, damp, odor, light grey, gravel @ base,
15	660			CL	50		SANDY CLAY, low, very stiff, damp, odor, light grey,
17	340			CL	30		SANDY CLAY, STA,
19	344			CL	30		SANDY CLAY, STA,
21	421			CL	60		SANDY CLAY, STA,
				SH	60		SHALE, CLAYEY, light purple, damp, very stiff, odor,
23	375			SH	30		SHALE, STA,

Completion Results

MKTF-37



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Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 20.25'
Ground Water	: 8'
Start Date	: 11/20/2014
Finish Date	: 11/20/2014

MKTF-38

(Sheet 1 of 1)

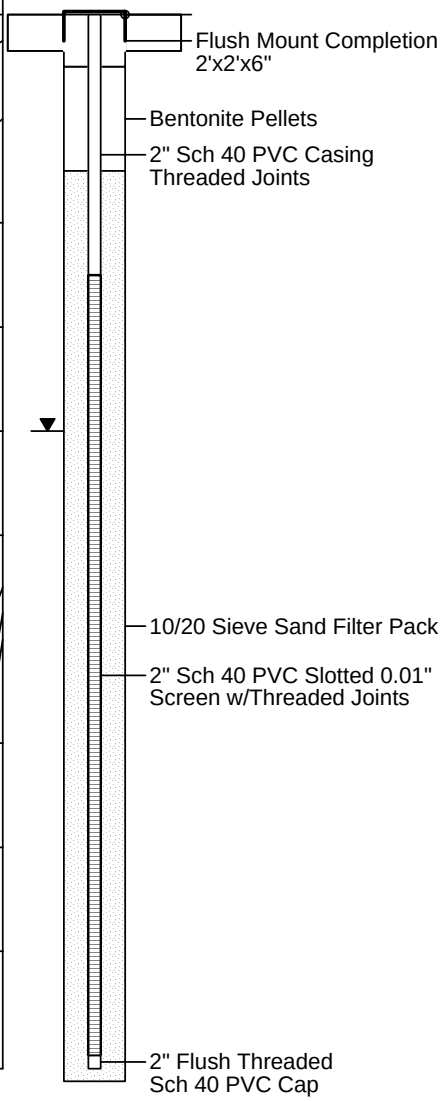
Elev., TOC (ft.msl)	: 6954.89
Elev., PAD (ft. msl)	: 6955.17
Elev., GL (ft. msl)	: 6954.54
Site Coordinates	:
N	: 1633451.01
E	: 2546222.09

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
-2							
-1							
0					100		ASPHALT/BASE,
1	217			CL/SP	90		SILTY CLAY/SAND/GRAVEL, low, firm, damp, brown, coarse grain sand, 1/4" to 1" gravel, odor,
2							
3	70			CL/SP	90		SILTY CLAY/SAND/GRAVEL, SIMILAR TO ABOVE (STA), odor,
4							
5	42			CL/SP	90		SILTY CLAY/SAND/GRAVEL, STA, odor,
6							
7	20			CL/SP	90		SILTY CLAY/SAND/GRAVEL, STA, odor,
8		▼					
9	9			CL/SP	90		SILTY CLAY/SAND/GRAVEL, STA, decrease in clay content, very moist to saturated, odor,
10				GW	90		SANDY GRAVEL, compact, brown, saturated, faint odor, very coarse grain sand, 1/4" to 1.5" gravel,
11	7			CL	90		
				GW	90		SANDY CLAY, low, firm to soft, moist, brown,
12							
13	8			GW	10		SANDY GRAVEL, STA (10-11), saturated,
							SANDY GRAVEL, STA, saturated,
14							
15	6			GW	10		SANDY GRAVEL, STA, saturated,
16							
17	4			CL	50		SANDY CLAY, low, firm, damp to moist, greyish brown, faint odor,
18							
19	5			CL	60		SANDY CLAY, STA,
20							
21							

Completion Results

MKTF-38



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Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 16'
Ground Water	: 12'
Start Date	: 11/14/2014
Finish Date	: 11/14/2014

MKTF-39

(Sheet 1 of 1)

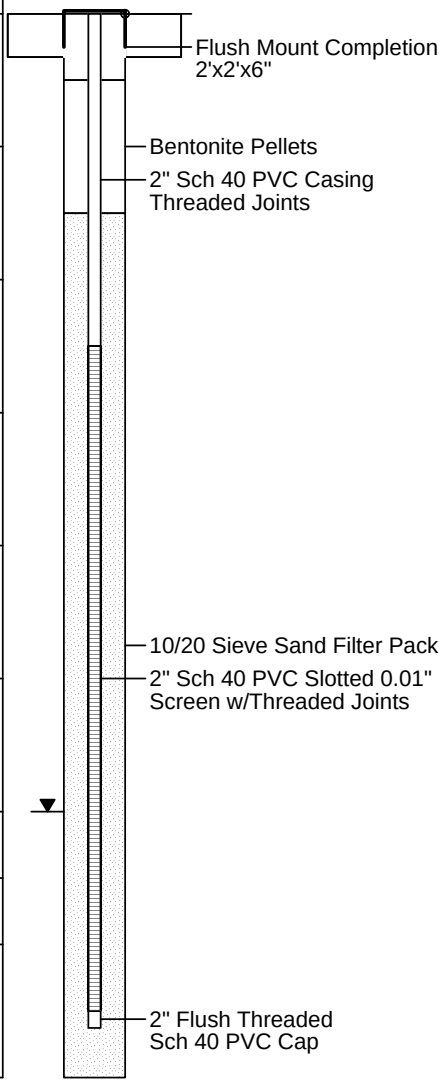
Elev., TOC (ft.msl)	: 6953.75
Elev., PAD (ft. msl)	: 6953.97
Elev., GL (ft. msl)	: 6953.12
Site Coordinates	:
N	: 1633729.23
E	: 2546265.99

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
1	2.1			ML	100		GRAVEL/CLAYEY SILT, FILL, brown, damp, faint odor,
3	29.4			CL	100		GRAVEL/SILTY CLAY, FILL, mod, stiff, damp, brown, no odor,
5	6.5			CL	90		SANDY SILTY CLAY, FILL, low, soft, damp, brown, pea sized gravel, no odor, damp,
7	4.5			SW	90		SILTY GRAVELLY SAND, FILL, loose, medium sand to 1.5" gravel, brown, no odor, damp,
9	400			CL/SC	90		SANDY CLAY/CLAYEY SAND, coarse, compact, damp to moist, brown, hydrocarbon (hc) odor, gravelly,
11	569	▼		CL	90		SANDY CLAY/CLAYEY SAND, SIMILAR TO ABOVE (STA), moist/oily, hc odor, gravelly,
12	-			GP	90		SANDY GRAVEL, loose, brown, saturated, hc odor, very coarse sand to 3/4" gravel,
13	51			CL	90		SILTY CLAY, low, very stiff, dry to damp, grey, faint odor @ base,
15	18			CL	90		SILTY CLAY, STA.

Completion Results

MKTF-39



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Western Refining SW, Inc.
Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 22'
Ground Water	: 10'
Start Date	: 11/13/2014
Finish Date	: 11/13/2014

MKTF-40

(Sheet 1 of 1)

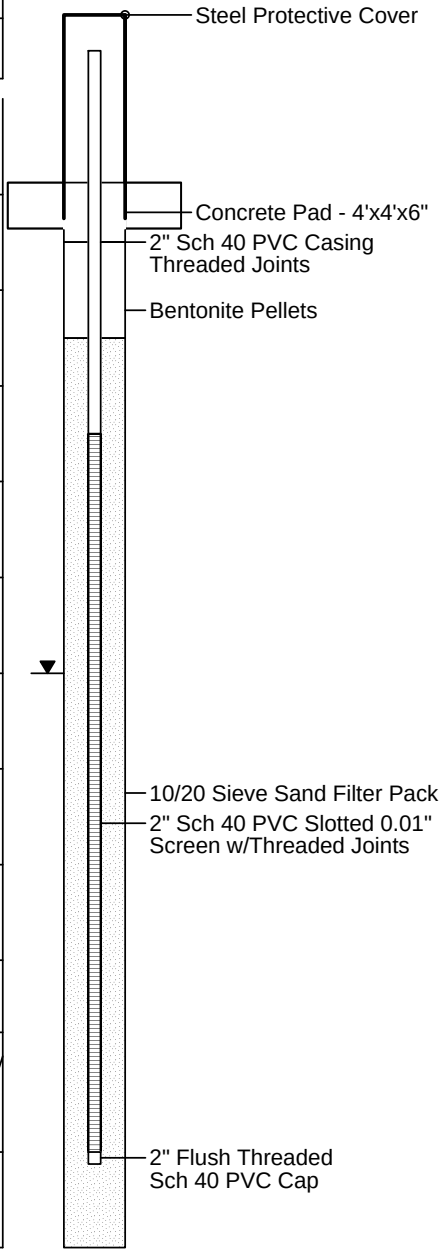
Elev., TOC (ft.msl)	: 6894.33
Elev., PAD (ft. msl)	: 6891.35
Elev., GL (ft. msl)	: 6890.48
Site Coordinates	:
N	: 1634085.50
E	: 2544637.81

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
0–1	0.8			CL	100		CLAY, mod, stiff, damp, brown, no odor, gravel,
1–3	0.1			CL	90		CLAY, SIMILAR TO ABOVE (STA), gravel,
3–5	0.7			CL	80		CLAY, STA,
5–7	1.8			CL	90		SANDY CLAY, low, firm to soft, damp, brown, no odor, moist 7-8' ,
7–9	2.0			CL	70		SANDY CLAY, STA, damp to moist,
9–11	0.6	▼		CL/SC	90		SANDY CLAY/CLAYEY SAND, STA, moist to saturated in clayey sand seams, no odor,
11–13	1.5			CL	20		SANDY SILTY CLAY, low, stiff, damp, brown, no odor, moist to saturated in sand seams,
13–15	2.2			CL/SC	80		SANDY CLAY/CLAYEY SAND, low, firm to soft,moist to saturated in clayey sand seams,
15–17	2.2			CL/SC	80		SANDY CLAY/CLAYEY SAND, STA, moist to saturated,
17–18				CL	90		SILTY CLAY, low, very stiff, damp, reddish brown and grey, no odor,
18–19	2.5			CL	80		SILTY CLAY, STA,
19–21	2.6			CL	50		SILTY CLAY, STA,

Completion Results

MKTF-40



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512-693-4190

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Western Refining SW, Inc.
Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 37.25'
Ground Water	: 34'
Start Date	: 11/13/2014
Finish Date	: 11/14/2014

MKTF-41

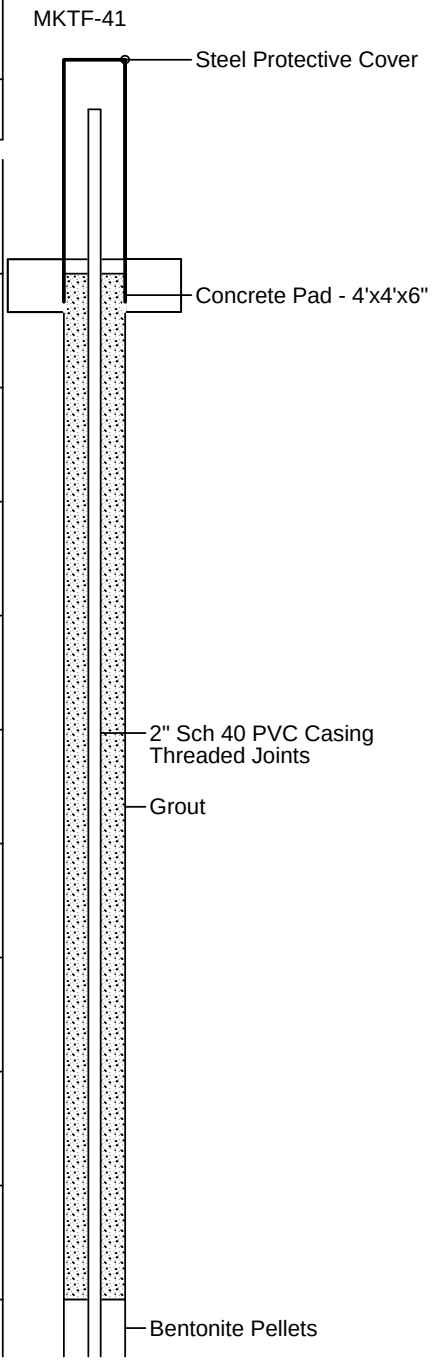
(Sheet 1 of 2)

Elev., TOC (ft.msl)	: 6893.64
Elev., PAD (ft. msl)	: 6891.11
Elev., GL (ft. msl)	: 6889.80
Site Coordinates	:
N	: 1633499.80
E	: 2544567.57

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
-2							
-1							
0							
1	2.6			CL	80		SANDY SILTY CLAY, low, stiff, dry, brown, no odor, fine grained sand, occasional gravel,
2							
3	2.3			CL	70		SANDY SILTY CLAY, SIMILAR TO ABOVE (STA), no odor,
4							
5	1.2			CL	40		SANDY SILTY CLAY, STA, no odor,
6							
7	2.4			CL/ML	50		SILTY CLAY/CLAYEY SILT, low, firm, dry, brown, no odor,
8							
9	3.9			CL	60		SANDY CLAY, low, very stiff, dry, brown, no odor,
10							
11	4.8			CL	30		SANDY CLAY, STA, damp,
12							
13	3.5			CL	40		SANDY CLAY, STA,
14							
15	1.2			CL	10		SANDY CLAY, STA,
16							
17	3.9			CL	50		SILTY CLAY, low, very stiff, dry/damp, light reddish brown with grey @ base, no odor,
18	4.0			CL			SILTY CLAY, STA, reddish brown and light grey,
19							

Completion Results



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Geologist	: Tracy Payne
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Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 37.25'
Ground Water	: 34'
Start Date	: 11/13/2014
Finish Date	: 11/14/2014

MKTF-41

(Sheet 2 of 2)

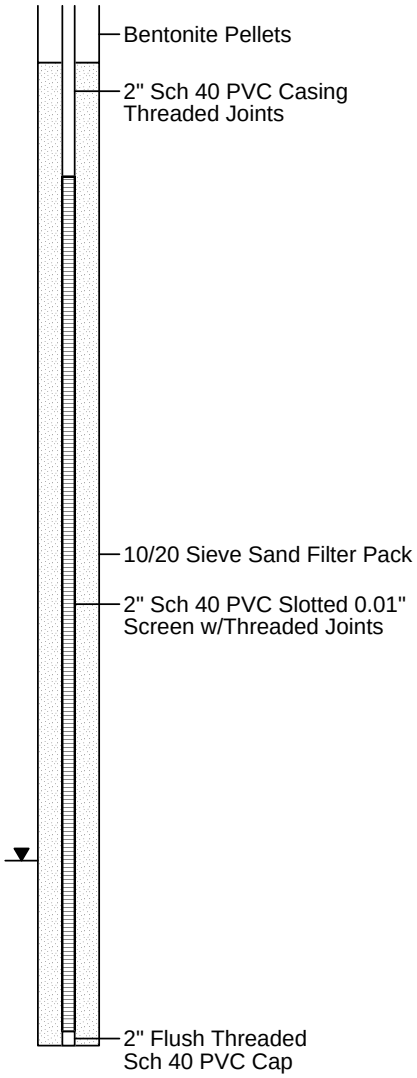
Elev., TOC (ft.msl)	: 6893.64
Elev., PAD (ft. msl)	: 6891.11
Elev., GL (ft. msl)	: 6889.80
Site Coordinates	:
N	: 1633499.80
E	: 2544567.57

Saturation
▼ Saturation

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
19	4.0			CL	80		
20							SILTY CLAY, STA, light reddish brown,
21	3.9			CL	50		
22							SILTY CLAY, STA, light reddish brown and trace grey,
23	3.6			CL	40		
24							SILTY CLAY, STA, light reddish brown,
25	3.3			CL	50		
26							SILTY CLAY, STA,
27	2.1			CL	10		
28							SILTY CLAY, STA,
29	2.8			CL	20		
30							SILTY CLAY, STA, moist @ top of sample,
31	2.6			CL	40		
32							SILTY CLAY, STA, calcareous,
33	3.1			CL	50		
34		▼					
35	2.9			CL	50		SILTY CLAY, STA, gravelly, moist to saturated, no odor, shale @ base,
36							
37	-			SH	10		SHALE, dark grey, dense to very dense,
38							
39							
40							

Completion Results

MKTF-41



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Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 30.25'
Ground Water	:
Start Date	: 11/12/2014
Finish Date	: 11/12/2014

MKTF-42

(Sheet 1 of 1)

Elev., TOC (ft.msl)	: 6892.95
Elev., PAD (ft. msl)	: 6890.42
Elev., GL (ft. msl)	: 6888.75
Site Coordinates	:
N	: 1633078.09
E	: 2544678.55

Water Level

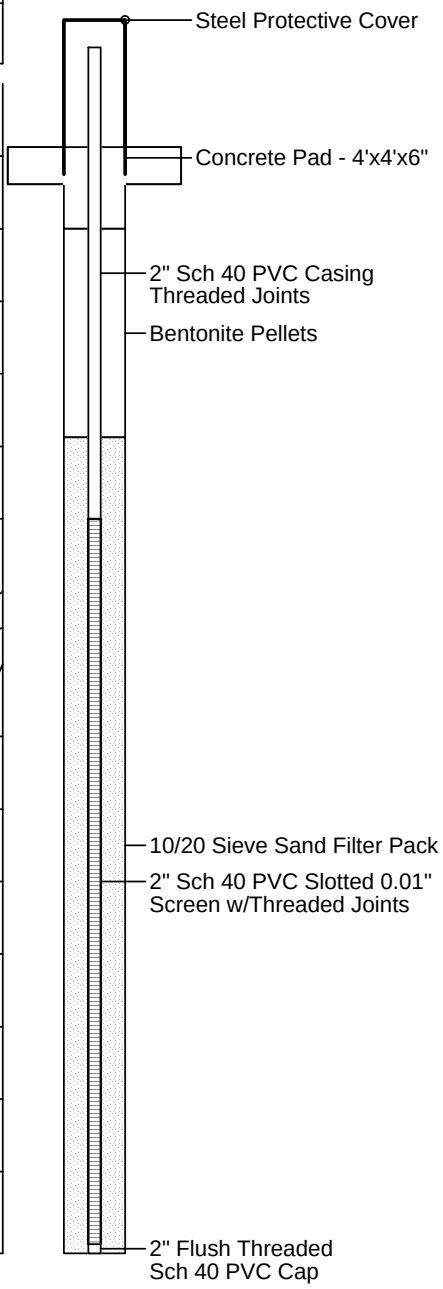
Depth to water - 18.79 ftbtoc 11-18-14

(not known to be static)

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
1	1.7			CL	100		SILTY CLAY, low, firm, dry, light brown, no odor,
3	2.8			CL	90		SILTY CLAY, low, very stiff, dry, light brown, calcareous, no odor, crumbly,
5	3.8			CL	60		SILTY CLAY, SIMILAR TO ABOVE (STA),
7	2.4			CL	60		SILTY CLAY, STA,
9	4.1			CL	30		SILTY CLAY, STA,
11	2.8			CL	50		SANDY CLAY, low, stiff, dry, light reddish brown with medium grained sand and interbedded sandstone less than 1/2" thick,
13	3.9			CL	80		SANDY CLAY, STA,
				CL	80		SILTY CLAY, low, very stiff, damp/dry, light reddish brown, no odor, calcareous,
15	2.5			CL	60		SILTY CLAY, STA, increase in moisture,
17	2.3			CL	50		SILTY CLAY, STA, trace sand, standstone seam @ 17.5', very dense,
19	2.4			CL	80		SILTY CLAY, STA, odor, extremely calcareous (50%),
21	1.5			CL	80		SILTY CLAY, STA, calcareous,
23	2.5			CL	10		SILTY CLAY, low, stiff, damp, reddish brown, no odor,
25	1.4			CL	60		SILTY CLAY, STA,
27	1.5			CL	60		SILTY CLAY, STA, trace grey,
29	1.2			CL	50		SILTY CLAY, STA, grey and reddish brown.

Completion Results

MKTF-42



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Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 28'
Ground Water	:
Start Date	: 11/11/2014
Finish Date	: 11/11/2014

MKTF-43

(Sheet 1 of 1)

Elev., TOC (ft.msl)	: 6876.90
Elev., PAD (ft. msl)	: 6874.12
Elev., GL (ft. msl)	: 6873.22
Site Coordinates	:
N	: 1633490.97
E	: 2544190.23

Water Level

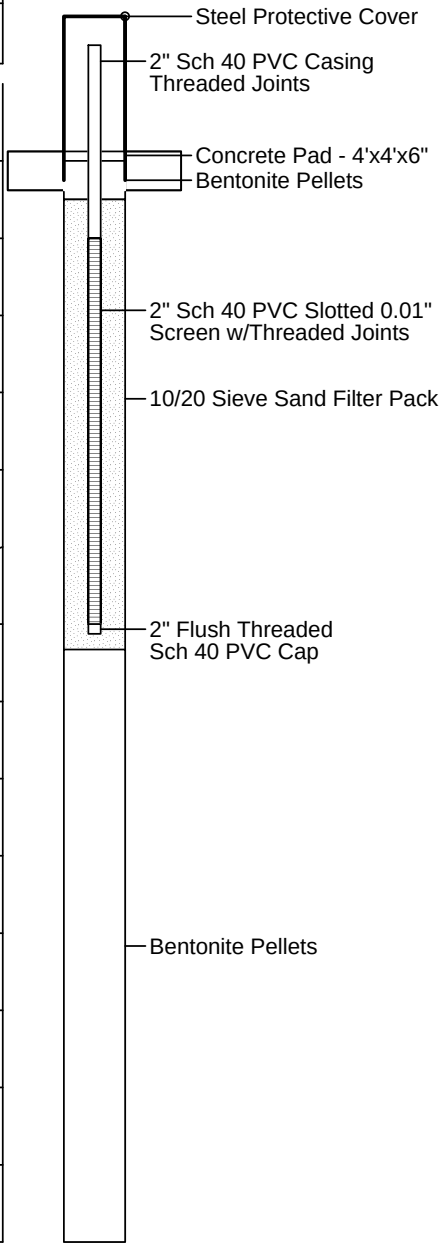
Depth to water - 6.95 ftbtoc 11-18-14

(not known to be static)

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	Sample	DESCRIPTION
1	3.6			CH	100		CLAY, high, stiff, damp, brown, no odor,
3	4.6			CH	50		CLAY, SIMILAR TO ABOVE (STA), moist in seams,
5	4.2			CH	90		CLAY, STA, moist in seams,
7	4.6			CH	90		CLAY, STA, reddish brown,
9	4.0			CL	90		SILTY CLAY, low, soft, damp, reddish brown, crumbly, no odor, trace grey clay @ 9.5',
11	3.3			CL	80		SILTY CLAY, STA, stiff,
13	3.8			CL	60		SILTY CLAY, STA, very stiff,
15	3.8			CL	80		SILTY CLAY, STA, very stiff, calcareous,
17	2.9			CL	80		SILTY CLAY, STA,
19	3.1			CL	50		SILTY CLAY, STA,
21	3.1			CL	60		SILTY CLAY, STA,
23	3.2			CL	10		SILTY CLAY, STA,
25	3.3			CL	30		SILTY CLAY, STA, sandstone seam 24.50',
27	3.2			CL	30		SILTY CLAY, STA.

Completion Results

MKTF-43



DiSorbo Consulting, LLC

1010 Travis Street
Houston, Texas 77002
713-955-1230

8501 N. MoPac Expy, Suite 300
Austin, Texas 78759
512-693-4190

DiSorbo
Environmental Consulting Firm

Western Refining SW, Inc.
Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 50'
Ground Water	:
Start Date	: 11/11/2014
Finish Date	: 11/12/2014

MKTF-44

(Sheet 1 of 2)

Elev., TOC (ft.msl)	: 6869.95
Elev., PAD (ft. msl)	: 6867.41
Elev., GL (ft. msl)	: 6866.06
Site Coordinates	:
N	: 1633681.48
E	: 2542981.45

Water Level

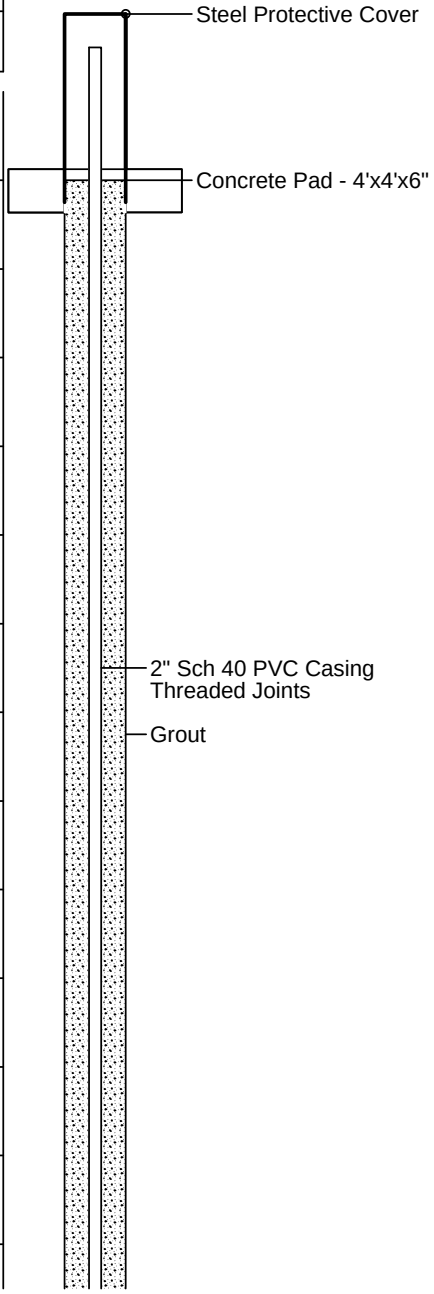
Depth to water - 48.80 ftbtoc 11-17-14

(not known to be static)

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	DESCRIPTION
-2						
-1						
0						
1	6.3			CH	100	CLAY, high, very stiff, damp, brown, no odor,
2						
3	8.3			CH	80	CLAY, SIMILAR TO ABOVE (STA),
4						
5	8.2			CH	70	CLAY, STA,
6						
7	8.6			CH	90	CLAY, STA,
8						
9	8.2			CH	80	CLAY, STA,
10						
11	7.9			CH	90	CLAY, STA, trace silt,
12						
13	7.8			CH	90	CLAY, high, very stiff, damp, brown, no odor,
14						
15	6.5			CH	10	CLAY, STA,
16						
17	7.1			CH	80	CLAY, STA,
18						
19	7.6			CL	70	SANDY SILTY CLAY, low, stiff, damp, light brown, no odor, gravel @ base, soft/crumbly 19-19.5' with lesser amount of clay,
20						
21	5.5			CL	80	SILTY CLAY, STA with sand seams/sandstone fro 20.5-22, dry, crumbly,
22						
23	6.4			CL	80	SANDY SILTY CLAY, low, stiff, dry to damp, light brown, no odor,
24	4.8			CL		GRAVELLY CLAY, STA, with gravel,
25						

Completion Results

MKTF-44



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Houston, Texas 77002
713-955-1230

8501 N. MoPac Expy, Suite 300
Austin, Texas 78759
512-693-4190

03-04-2015 C:\Users\cholmes\Documents\M-Tech\samples\WEST14003\MKTF-44.bor

DiSorbo
Environmental Consulting Firm

Western Refining SW, Inc.
Gallup Refinery - Hydrocarbon Seep
Job No. WEST14003

Geologist	: Tracy Payne
Driller	: C. Ortiz
Drilling Rig	: CME 75
Drilling Method	: Hollow Stem Auger 7.5"
Sampling Method	: Split Spoon 2" Dia, 2' Long
Comments	:
Total Depth	: 50'
Ground Water	:
Start Date	: 11/11/2014
Finish Date	: 11/12/2014

MKTF-44

(Sheet 2 of 2)

Elev., TOC (ft.msl)	: 6869.95
Elev., PAD (ft. msl)	: 6867.41
Elev., GL (ft. msl)	: 6866.06
Site Coordinates	:
N	: 1633681.48
E	: 2542981.45

Water Level

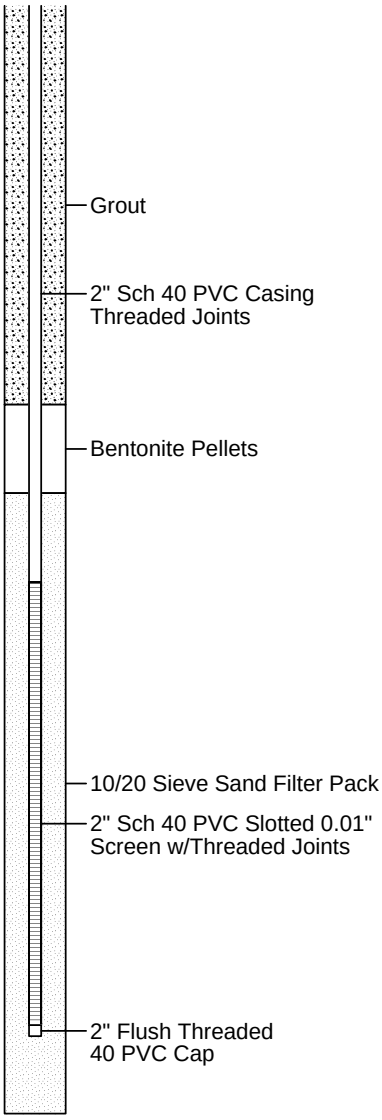
Depth to water - 48.80 ftbtoc 11-17-14

(not known to be static)

Depth (ft.)	PID (ppm)	Saturation	Lithology	USCS	Recovery (%)	DESCRIPTION
25	4.8			CL	70	
26						
27	3.8			CL	50	GRAVELLY CLAY, STA, very stiff,
28						
29	4.8			CL	50	SILTY CLAY, low, very stiff, damp/dry, reddish brown, no odor, calcareous,
30						
31	4.6			CL	90	SILTY CLAY, low, firm/crumbly, damp to dry, reddish brown, no odor, calcareous,
32						
33	4.3			CL	80	SILTY CLAY, STA, stiff to very stiff,
34						
35	3.6			CL	80	SILTY CLAY, STA,
36						
37	1.9			CL	10	SILTY CLAY, STA,
38						
39	4.4			CL	20	SILTY CLAY, STA,
40						
41	3.8			CL	80	SILTY CLAY, STA,
42						
43	3.8			CL	20	SILTY CLAY, low, very stiff, crumbly, damp to dry, reddish brown, no odor,
44						
45	3.9			CL	60	SILTY CLAY, STA,
46						
47	3.8			CL	40	SILTY CLAY, STA,
48						
49	3.7			CL	20	SILTY CLAY, STA,
50						
51						
52						

Completion Results

MKTF-44



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8501 N. MoPac Expy, Suite 300
Austin, Texas 78759
512-693-4190

Appendix B

Photos of Sewer Line Excavation

Photos of Sewer Pipeline Repair near Bundle Cleaning Pad

Photo of replaced sewer line near south end of excavation looking to the west.

View from south end of excavation looking to the north.

Photo of south end of excavation looking to the east. South wall is concrete sewer junction box.

View of excavation looking to north with Bundle Cleaning Pad in background.

View of north end of excavation with new sewer line terminating into concrete sewer junction box on west side of Bundle Cleaning Pad.

Appendix C

Well Survey Data

DePauli Engineering
& Surveying, LLC.
Civil Engineers and Land Surveyors

Phone: 505-863-5440 • Fax: 505-863-1919 • www.depauliengineering.com
307 South 4th Street • Gallup, NM 87301
PO BOX 876 • Gallup, NM 87305

February 11, 2014

Mr. Ed Riege, Environmental Manager
Western Refining-Gallup Refinery
Route 3 Box 7
Gallup, NM 87301

Re: Western Refining Monitoring Wells

Dear Mr. Riege:

DePauli Engineering & Surveying, LLC completed the field survey of the 18 monitoring wells at Western Refining-Gallup Refinery on January 21, 2014. The wells were surveyed for the following parameter: ground level elevation, ground level elevation inside steel sleeve, center top steel lid elevation, well casing rim elevation and corresponding measuring point description associated with each elevation. Survey conducted enlisted NM Surveyor in Training and a Technician (under my direct supervision), from DePauli Engineering Surveying, LLC and one Gallup Refinery representative to assist with the location of the wells.

The instruments used to complete the survey consisted of a Leica VIVA GS10 GPS (global positing system) and System 1200 GPS. The method used to survey the wells was Real-time Kinematic GPS Surveying (RTK). RTK surveying requires that two or more receivers are operated simultaneously. The aspect of the procedure involves a radio transmitting a signal from the base station. The base station's coordinates are utilized to make the appropriate corrections to the error involved with the GPS signals. The rover receives the corrections thence giving the rover observation corrected valves. The horizontal and vertical positions are determined by differential GPS involving the base line surveyed from local base station to survey position. The base line measurements are surveyed for one minute (60 observations). This is verified by surveying known local control points and bench marks.

The horizontal and vertical positions of the top of the PVC casing (unless otherwise noted) and the vertical positions for the lid, ground elevation inside the steel casing, and the surrounding ground elevation is shown on the attached sheet labeled "Western Refining Monitoring Wells January 21, 2014." The horizontal position is NAD 83 datum and the vertical positions are NGVD 1929. Elevations were taken using the concrete pad surrounding each well and locations

noted on the report. Ground elevation was taken using the concrete pad surrounding each well and locations shown on the report.

The requested field survey was complete on January 21, 2014 in accordance with sections 500.1 through 500.12 of the Regulations and Rules of the Board of Registration for Professional Engineers and Surveyors Minimum Standards for Surveying in New Mexico; which horizontal positions were measured to the nearest 0.1-ft and vertical elevations were measured to an accuracy of 0.01-ft.

If you have any questions concerning this survey please do not hesitate to contact our office.

Sincerely,

Marc DePauli

Marc DePauli, PE/PS

Western Refining Monitoring Wells January 21, 2014

Well #	Northing	Easting	Elevation	Description
MKTF-10	1,633,807.47	2,545,853.54	6937.16	North edge PVC casing
			6937.51	Center steel lid
			6936.63	North side ground elev. inside steel sleeve
			6937.51	Average corner elevation of concrete collar
MKTF-15	1,633,845.57	2,545,934.58	6943.48	North edge PVC casing
			6943.73	Center steel lid
			6943.19	North side ground elev. inside steel sleeve
			6943.74	**Average elevation of concrete collar
			** Concrete collar is in general circular shape	
MKTF-16	1,633,718.14	2,546,068.55	6950.58	North edge PVC casing
			6950.97	Center steel lid
			6950.58	North side ground elev. inside steel sleeve
			6951.00	Average corner elevation of concrete collar
MKTF-11	1,633,806.93	2,545,754.77	6931.34	South edge PVC casing
			6931.61	Center steel lid
			6930.86	North side ground elev. inside steel sleeve
			6931.61	Average corner elevation of concrete collar
MKTF-03	1,633,746.53	2,545,756.87	6931.31	North edge PVC casing
			6931.69	Center steel lid
			6930.85	North side ground elev. inside steel sleeve
			6931.73	Average corner elevation of concrete collar
MKTF-04	1,633,649.46	2,545,752.83	6933.57	North edge PVC casing
			6933.91	Center steel lid
			6933.24	North side ground elev. inside steel sleeve
			6933.90	Average corner elevation of concrete collar
MKTF-05	1,633,472.30	2,545,769.95	6942.22	North edge PVC casing
			6942.80	Center steel lid
			6941.95	South side ground elev. inside steel sleeve
			6939.49	Average corner elevation of concrete collar
MKTF-09	1,633,681.33	2,545,895.93	6946.50	North edge PVC casing
			6947.21	Center steel lid
			6945.90	South side ground elev. inside steel sleeve
			6943.57	Average corner elevation of concrete collar

Well #	Northing	Easting	Elevation	Description
MKTF-08	1,633,598.94	2,545,885.02	6947.09	North edge PVC casing
			6947.48	Center steel lid
			6942.67	South side ground elev. inside steel sleeve
			6944.02	Average corner elevation of concrete collar
MKTF-07	1,633,555.11	2,545,885.42	6947.18	North edge PVC casing
			6947.84	Center steel lid
			6947.06	South side ground elev. inside steel sleeve
			6944.40	Average corner elevation of concrete collar
MKTF-06	1,633,556.28	2,545,811.85	6946.81	North edge PVC casing
			6947.29	Center steel lid
			6946.63	South side ground elev. inside steel sleeve
			6944.24	Average corner elevation of concrete collar
MKTF-18	1,633,497.53	2,546,006.29	6950.65	**North edge PVC casing
			6950.96	Center steel lid
			6950.17	North side ground elev. inside steel sleeve
			6950.97	Average corner elevation of concrete collar
				** Mark was existing on PVC casing
MKTF-12	1,633,542.07	2,545,688.29	6942.11	North edge PVC casing
			6942.84	Center steel lid
			6941.88	South side ground elev. inside steel sleeve
			6939.70	Average corner elevation of concrete collar
MKTF-13	1,633,625.25	2,545,697.39	6935.18	**North edge PVC casing
			6936.89	Center steel lid
			6934.83	South side ground elev. inside steel sleeve
			6933.67	Average corner elevation of concrete collar
				** PVC casing not typical
MKTF-14	1,633,719.43	2,545,625.96	6928.02	North edge PVC casing
			6928.75	Center steel lid
			6927.80	South side ground elev. inside steel sleeve
			6925.65	Average corner elevation of concrete collar
MKTF-01	1,633,864.41	2,545,561.73	6920.67	**North edge PVC casing
			6921.68	Center steel lid
			6920.67	South side ground elev. inside steel sleeve
			6918.28	**Average corner elevation of concrete collar
				** Inside ground elev. is flush with PVC casing

Well #	Northing	Easting	Elevation	Description
MKTF-02	1,633,946.93	2,545,530.46	6917.45	** North edge PVC casing
			6918.31	Center steel lid
			6917.18	South side ground elev. inside steel sleeve
			6915.00	Average corner elevation of concrete collar
				** PVC casing not typical
MKTF-17	1,633,268.93	2,545,850.73	6945.76	North edge PVC casing
			6946.00	Center steel lid
			6945.64	North side ground elev. inside steel sleeve
			6945.79	** Average corner elevation of concrete collar

** Concrete collar is in general circular shape

Marc DePauli

Marc DePauli PS13606

2-11-2014

Date

MARC A. DEPAULI
NEW MEXICO
13606
REGISTERED PROFESSIONAL SURVEYOR

DePauli Engineering
& Surveying, LLC.
Civil Engineers and Land Surveyors

Phone: 505-863-5440 • Fax: 505-863-1919 • www.depauliengineering.com
307 South 4th Street • Gallup, NM 87301
PO BOX 876 • Gallup, NM 87305

May 12, 2014

Mr. Ed Riege, Environmental Manager
Western Refining-Gallup Refinery
Route 3 Box 7
Gallup, NM 87301

Re: Western Refining Monitoring Wells

Dear Mr. Riege:

DePauli Engineering & Surveying, LLC completed the field survey of the 16 monitoring wells at Western Refining-Gallup Refinery on April 30, 2014. The wells were surveyed for the following parameter: ground level elevation, ground level elevation inside steel sleeve, center top steel lid elevation, well casing rim elevation and corresponding measuring point description associated with each elevation. The survey was conducted by an enlisted NM Surveyor in Training and a Technician (under my direct supervision), from DePauli Engineering & Surveying, LLC and one Gallup Refinery representative to assist with the location of the wells.

The instruments used to complete the survey consisted of a Leica VIVA GS10 GPS (global positing system) and System 1200 GPS. The method used to survey the wells was Real-time Kinematic GPS Surveying (RTK). RTK surveying requires that two or more receivers are operated simultaneously. The aspect of the procedure involves a radio transmitting a signal from the base station. The base station's coordinates are utilized to make the appropriate corrections to the error involved with the GPS signals. The rover receives the corrections thence giving the rover observation corrected valves. The horizontal and vertical positions are determined by differential GPS involving the base line surveyed from local base station to survey position. The base line measurements are surveyed for one minute (60 observations). This is verified by surveying known local control points and bench marks.

The horizontal positions of the top of the PVC casing or top of the lid (unless otherwise noted) and the vertical positions for the PVC casing, lid, ground elevation inside the steel casing, and the surrounding ground elevation is shown on the attached sheet labeled "Coordinate and Elevation Summary, Western Refining Monitoring Wells" The horizontal position is NAD 83

datum and the vertical positions are NGVD 1929. Elevations were taken using the concrete pad surrounding each well and locations noted on the report. Ground elevation was taken using the concrete pad surrounding each well and locations shown on the report.

The requested field survey was completed on April 30, 2014 in accordance with sections 500.1 through 500.12 of the Regulations and Rules of the Board of Registration for Professional Engineers and Surveyors Minimum Standards for Surveying in New Mexico; which horizontal positions were measured to the nearest 0.1-ft and vertical elevations were measured to an accuracy of 0.01-ft.

If you have any questions concerning this survey please do not hesitate to contact our office.

Sincerely,

Marc DePauli

Marc DePauli, PE/PS

MARC A. DEPAULI
NEW MEXICO
13606
REGISTERED PROFESSIONAL SURVEYOR

DePauli Engineering & Surveying, LLC.
307 S. 4th Street
Gallup, NM 87301

April 30, 2014

Coordinate and Elevation Summary, Western Refining Monitoring Wells

Well #	Northing	Easting	Elevation	Description
MKTF-21	1633570.30	2546110.00	6952.57	North edge PVC casing.
			6952.77	Center Steel Lid
			6952.00	North side ground elevation inside steel sleeve
			6952.68	Average elevation of concrete collar.
MKTF-20	1633698.28	2546111.23	6951.78	North edge PVC casing.
			6952.05	Center Steel Lid
			6951.17	North side ground elevation inside steel sleeve
			6951.89	Average elevation of concrete collar.
MKTF-24	1633853.19	2545468.48	6928.72	North edge PVC casing.
			6929.21	Center Steel Lid
			6924.62	North side ground elevation inside steel sleeve
			6926.07	Average elevation of concrete collar.
MKTF-23			6929.98	North edge PVC casing.
	1633750.93	2545503.70	6930.55	Center Steel Lid
			6925.79	North side ground elevation inside steel sleeve
			6927.23	Average elevation of concrete collar.
MKTF-22			6942.31	**North edge PVC casing.
	1633501.64	2545478.20	6942.94	Center Steel Lid
			6938.57	North side ground elevation inside steel sleeve
			6939.76	Average elevation of concrete collar.
				** PVC casing not typical.
MKTF-31			6906.87	North edge PVC casing.
	1633898.83	2544938.99	6907.58	Center Steel Lid
			6903.11	North side ground elevation inside steel sleeve
			6904.26	Average elevation of concrete collar.
MKTF-25			6916.19	North edge PVC casing.
	1634015.86	2545275.68	6916.66	Center Steel Lid
			6911.79	North side ground elevation inside steel sleeve
			6913.35	Average elevation of concrete collar.
MKTF-30			6900.80	North edge PVC casing.
	1634225.67	2544937.91	6901.34	Center Steel Lid
			6896.68	North side ground elevation inside steel sleeve
			6898.10	Average elevation of concrete collar.

Coordinate and Elevation Summary, Western Refining Monitoring Wells

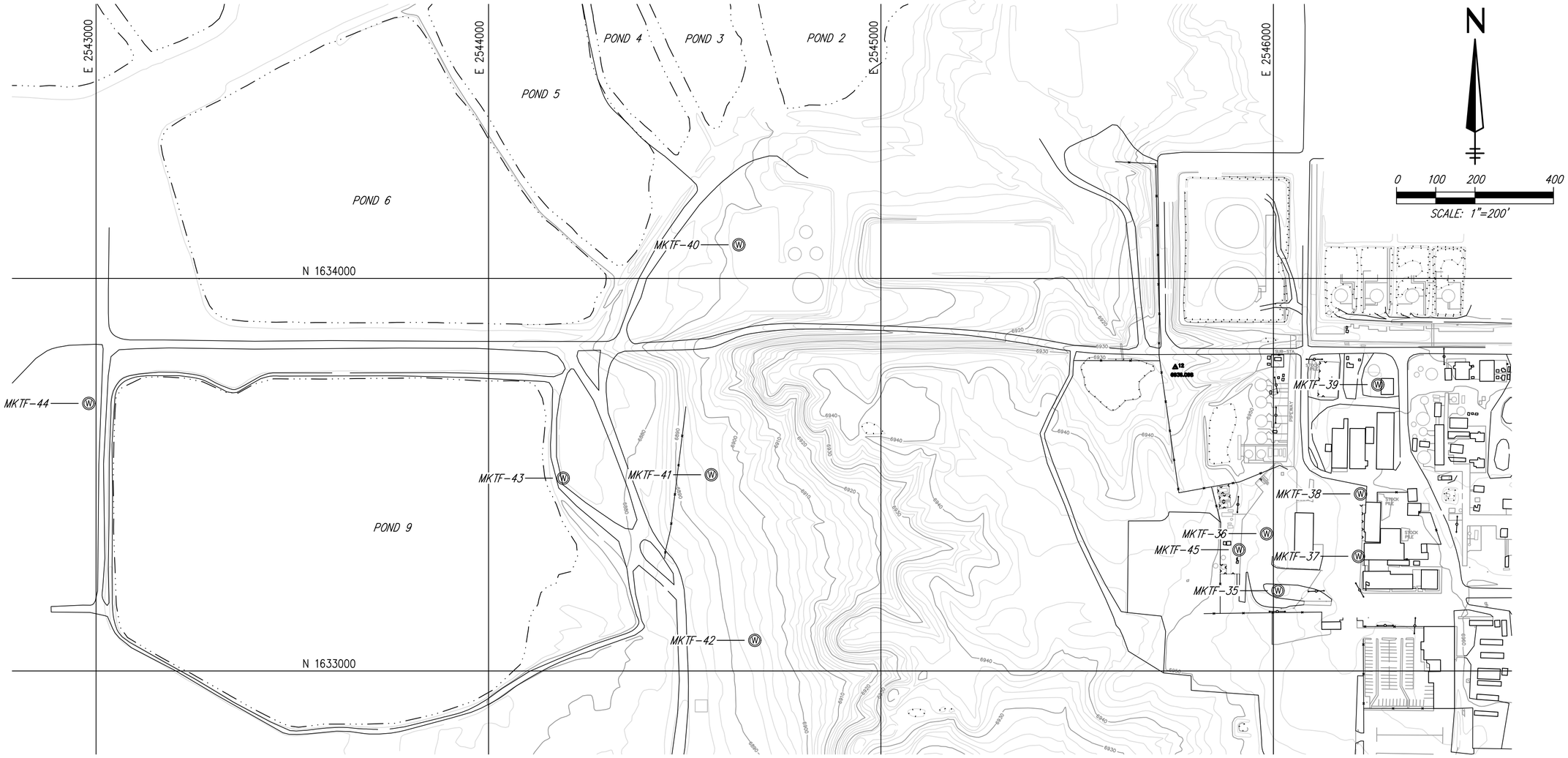
Well #	Northing	Easting	Elevation	Description
MKTF-29			6901.62	North edge PVC casing.
	1634249.76	2545258.34	6901.98	Center Steel Lid
			6897.67	North side ground elevation inside steel sleeve
			6898.83	Average elevation of concrete collar.
MKTF-28			6921.52	North edge PVC casing.
	1634263.44	2545650.04	6922.11	Center Steel Lid
			6917.51	North side ground elevation inside steel sleeve
			6918.67	Average elevation of concrete collar.
MKTF-27			6917.90	North edge PVC casing. (ex. mark)
	1634115.56	2545620.98	6918.49	Center Steel Lid
			6914.18	North side ground elevation inside steel sleeve
			6915.36	Average elevation of concrete collar.
MKTF-26			6915.31	North edge PVC casing.
	1634033.63	2545492.39	6915.86	Center Steel Lid
			6911.35	North side ground elevation inside steel sleeve
			6912.55	Average elevation of concrete collar.
MKTF-19	1633381.19	2545842.82	6944.67	North edge PVC casing.
			6945.00	Center Steel Lid
			6944.34	North side ground elevation inside steel sleeve
			6944.89	Average elevation of concrete collar.
MKTF-34			6945.35	North edge PVC casing.
	1633118.42	2545681.30	6945.71	Center Steel Lid
			6943.52	North side ground elevation inside steel sleeve
			6942.42	Average elevation of concrete collar.
MKTF-32			6911.11	North edge PVC casing.
	1633443.56	2544840.32	6911.68	Center Steel Lid
			6907.16	North side ground elevation inside steel sleeve
			6908.44	Average elevation of concrete collar.
MKTF-33	1633261.99	2545318.27	6939.75	North edge PVC casing.
			N/A	Center Steel Lid
			N/A	North side ground elevation inside steel sleeve
			6936.59	Elevation of surrounding ground.

Monitoring well has no concrete collar and steel casing.

MARC A. DEPAULI NEW MEXICO 13606 REGISTERED PROFESSIONAL SURVEYOR

Marc DePauli 5-12-2014

Marc DePauli PS13606 Date



MKTF-35
N: 1633204.45
E: 2546011.60 CENTER OF METAL LID
Z: 6951.90 TOP CENTER OF METAL LID
Z: 6951.65 N. TOP OF PVC PIPE
Z: 6951.25 N. TOP OF INSIDE GROUND LINE
Z: 6951.90 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-36
N: 1633349.47
E: 2545982.58 CENTER OF METAL LID
Z: 6950.67 TOP CENTER OF METAL LID
Z: 6950.12 N. TOP OF PVC PIPE
Z: 6949.87 N. TOP OF INSIDE GROUND LINE
Z: 6950.67 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-37
N: 1633291.89
E: 2546216.67 CENTER OF METAL LID
Z: 6959.07 TOP CENTER OF METAL LID
Z: 6958.87 N. TOP OF PVC PIPE
Z: 6958.62 N. TOP OF INSIDE GROUND LINE
Z: 6959.07 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-38
N: 1633451.01
E: 2546222.09 CENTER OF METAL LID
Z: 6955.17 TOP CENTER OF METAL LID
Z: 6954.89 N. TOP OF PVC PIPE
Z: 6954.54 N. TOP OF INSIDE GROUND LINE
Z: 6955.17 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-39
N: 1633729.23
E: 2546265.99 CENTER OF METAL LID
Z: 6953.97 TOP CENTER OF METAL LID
Z: 6953.75 N. TOP OF PVC PIPE
Z: 6953.12 N. TOP OF INSIDE GROUND LINE
Z: 6953.97 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-40
N: 1634085.50
E: 2544637.81 CENTER OF METAL LID
Z: 6894.73 TOP CENTER OF METAL LID
Z: 6894.33 N. TOP OF PVC PIPE
Z: 6890.48 N. TOP OF INSIDE GROUND LINE
Z: 6891.35 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-41
N: 1633499.80
E: 2544567.57 CENTER OF METAL LID
Z: 6894.13 TOP CENTER OF METAL LID
Z: 6893.64 N. TOP OF PVC PIPE
Z: 6889.80 N. TOP OF INSIDE GROUND LINE
Z: 6891.11 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-42
N: 1633078.09
E: 2544678.55 CENTER OF METAL LID
Z: 6893.27 TOP CENTER OF METAL LID
Z: 6892.95 N. TOP OF PVC PIPE
Z: 6888.75 N. TOP OF INSIDE GROUND LINE
Z: 6890.42 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-43
N: 1633490.97
E: 2544190.23 CENTER OF METAL LID
Z: 6877.40 TOP CENTER OF METAL LID
Z: 6876.90 N. TOP OF PVC PIPE
Z: 6873.22 N. TOP OF INSIDE GROUND LINE
Z: 6874.12 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-44
N: 1633681.48
E: 2542981.45 CENTER OF METAL LID
Z: 6870.32 TOP CENTER OF METAL LID
Z: 6869.95 N. TOP OF PVC PIPE
Z: 6866.06 N. TOP OF INSIDE GROUND LINE
Z: 6867.41 N. TOP OF OUTSIDE CONCRETE PAD

MKTF-45
N: 1633308.57
E: 2545912.37 CENTER OF METAL LID
Z: 6951.33 TOP CENTER OF METAL LID
Z: 6949.59 N. TOP OF PVC PIPE
Z: 6948.27 N. TOP OF INSIDE GROUND LINE
Z: 6948.63 N. TOP OF OUTSIDE CONCRETE PAD

SYMBOLS LEGEND
Ⓦ MONITORING WELL

NOTES
1 FIELD SURVEY PERFORMED DECEMBER 16, 2014, 10:30 a.m. to 4:30 p.m. & JANUARY 12, 2015, 10:30 – a.m. to 11:00 a.m.

2 FIELD MEASUREMENTS PERFORMED UTILIZING THALES 'Z-MAX' BASE AND ROVER G.P.S. SYSTEM WHICH CAN NOT BE CALIBRATED. INSIDE AND OUTSIDE APPURTENANT MEASUREMENTS PERFORMED WITH STEEL TAPE.

3 STATE PLANE COORDINATES BASED ON THE BRASS CAP 1-040-105 USING DIFFERENTIAL G.P.S. DERIVED MEASUREMENTS.

4 THE COORDINATES SHOWN ARE N.M. STATE PLANE WEST ZONE GRID COORDINATES, ELEVATIONS ARE NGVD29 (ADD 3.37 TO REACH NAVD88 DATUM AND AN ADDITIONAL 1.14 TO REACH EXISTING WESTERN REFINING TOPOGRAPHC SURVEY DATUM WHICH IS SHOWN HEREON).

CLYDE J. KING
NEW MEXICO
13979
REGISTERED PROFESSIONAL SURVEYOR

SURVEYOR'S CERTIFICATE
I, Clyde J. King, a New Mexico Professional Surveyor do hereby certify that this plat was prepared from a field survey performed by me or under my direct supervision, that I am responsible for this survey, that this survey is true and correct to the best of my knowledge and belief, that this plat and the field survey upon which it is based meet the Minimum Standards for Surveying in New Mexico and that this survey is not a land division or subdivision as defined by the New Mexico Subdivision Act.

Clyde J. King, PS13979 — 1-16-15 Date

MONITORING WELL SURVEY
in Section 33, T15N, R15W, N.M.P.M., Western Refining, Jamestown, McKinley County, New Mexico, U.S.A.

H.E.I. HAMMON ENTERPRISES, INC.
PROFESSIONAL LAND SURVEYING SERVICES
P. O. Box 770 ■ Ramah, NM 87321 ■ Tel: (505) 870-6901 ■ HEISurveys Yahoo.com

141216 MW DATA.DWG DRAWN BY: AH CHECKED BY: CK DATE:1-16-15 REV. DATE: xxx

Appendix D

Analytical Reports

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

July 24, 2013

Cheryl Johnson

Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West of Tank 102 OrderNo.: 1307892

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/19/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1307892**
Date Reported: **7/24/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: HA1
Project: Seep West of Tank 102
Collection Date: 7/17/2013 1:00:00 PM
Lab ID: 1307892-001
Matrix: AQUEOUS
Received Date: 7/19/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**GSA**
Diesel Range Organics (DRO)	3.3	1.0		mg/L	1	7/19/2013 2:57:57 PM	8462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/19/2013 2:57:57 PM	8462
Surr: DNOP	118	70.1-140		%REC	1	7/19/2013 2:57:57 PM	8462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DAM**
Gasoline Range Organics (GRO)	19	5.0		mg/L	100	7/19/2013 3:26:08 PM	R12077
Surr: BFB	93.4	51.5-151		%REC	100	7/19/2013 3:26:08 PM	R12077

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: HA2
Project: Seep West of Tank 102
Collection Date: 7/17/2013 1:15:00 PM
Lab ID: 1307892-002
Matrix: AQUEOUS
Received Date: 7/19/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**GSA**
Diesel Range Organics (DRO)	3.1	1.0		mg/L	1	7/19/2013 3:28:20 PM	8462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/19/2013 3:28:20 PM	8462
Surr: DNOP	114	70.1-140		%REC	1	7/19/2013 3:28:20 PM	8462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DAM**
Gasoline Range Organics (GRO)	16	1.0		mg/L	20	7/19/2013 3:56:29 PM	R12077
Surr: BFB	102	51.5-151		%REC	20	7/19/2013 3:56:29 PM	R12077

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 **1307892**
Date Reported: **7/24/2013**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: HA3
Project: Seep West of Tank 102
Collection Date: 7/17/2013 1:30:00 PM
Lab ID: 1307892-003
Matrix: AQUEOUS
Received Date: 7/19/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**GSA**
Diesel Range Organics (DRO)	4.8	1.0		mg/L	1	7/19/2013 3:58:41 PM	8462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/19/2013 3:58:41 PM	8462
Surr: DNOP	116	70.1-140		%REC	1	7/19/2013 3:58:41 PM	8462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DAM**
Gasoline Range Organics (GRO)	25	1.0		mg/L	20	7/19/2013 4:26:52 PM	R12077
Surr: BFB	114	51.5-151		%REC	20	7/19/2013 4:26:52 PM	R12077

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: HA4
Project: Seep West of Tank 102
Collection Date: 7/17/2013 1:55:00 PM
Lab ID: 1307892-004
Matrix: AQUEOUS
Received Date: 7/19/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**GSA**
Diesel Range Organics (DRO)	17	1.0		mg/L	1	7/19/2013 4:28:49 PM	8462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/19/2013 4:28:49 PM	8462
Surr: DNOP	130	70.1-140		%REC	1	7/19/2013 4:28:49 PM	8462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DAM**
Gasoline Range Organics (GRO)	17	5.0		mg/L	100	7/19/2013 2:55:45 PM	R12077
Surr: BFB	92.9	51.5-151		%REC	100	7/19/2013 2:55:45 PM	R12077

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#: **1307892**
24-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID	**MB-8462**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**PBW**	Batch ID:	**8462**	RunNo:	**12068**					
Prep Date:	**7/19/2013**	Analysis Date:	**7/19/2013**	SeqNo:	**343222**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		107	70.1	140			

Sample ID	**LCS-8462**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**LCSW**	Batch ID:	**8462**	RunNo:	**12068**					
Prep Date:	**7/19/2013**	Analysis Date:	**7/19/2013**	SeqNo:	**343223**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.6	1.0	5.000	0	113	89.1	151			
Surr: DNOP	0.64		0.5000		128	70.1	140			

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#: **1307892**
24-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBW**	Batch ID:	**R12077**	RunNo:	**12077**				
Prep Date:		Analysis Date:	**7/19/2013**	SeqNo:	**343355**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		87.8	51.5	151			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSW**	Batch ID:	**R12077**	RunNo:	**12077**				
Prep Date:		Analysis Date:	**7/19/2013**	SeqNo:	**343356**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.4	80	120			
Surr: BFB	19		20.00		96.7	51.5	151			

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

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: 1307892 RcptNo: 1

Received by/date: MG 07/19/13

Logged By: Michelle Garcia 7/19/2013 8:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 7/19/2013 9:27:02 AM Michelle Garcia

Reviewed By: IO 07/19/13

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.

Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: SEEP WEST OF TANK 102

Project #:

Project Manager: CHERYL JOHNSON

Sampler: TRACY PAYNE RPS

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1307892	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)
7/17/13	1300	GW	HA1	3 40ML VOA	HCL	-001			X								
	1315	GW	HA2			-002			X								
	1330	GW	HA3			-003			X								
	1355	GW	HA4			-004			X								

Date	Time	Relinquished by	Received by	Date	Time
7-18-13	12:00	[signature]	[signature]	07/19/13	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

July 16, 2013

Cheryl Johnson
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-0231
FAX: (505) 722-0210

RE: Seep West of 102 OrderNo.: 1307269

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/8/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1307269**
Date Reported: **7/16/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Seep Hole #6
Project: Seep West of 102
Collection Date: 7/8/2013 9:45:00 AM
Lab ID: 1307269-001
Matrix: PRODUCT
Received Date: 7/8/2013 1:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
DRO BY 8015D						Analyst:	**JME**
Diesel Range Organics (DRO)	55	2.0		wt%	20	7/9/2013 4:30:52 PM	8285
Motor Oil Range Organics (MRO)	ND	10		wt%	20	7/9/2013 4:30:52 PM	8285
Surr: DNOP	0	76.7-135	S	%REC	20	7/9/2013 4:30:52 PM	8285
GRO BY 8015D						Analyst:	**NSB**
Gasoline Range Organics (GRO)	49	2.5		wt%	1	7/10/2013 11:07:52 AM	8284
Surr: BFB	127	65.4-138		%REC	1	7/10/2013 11:07:52 AM	8284
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	ND	2.0		mg/L	20	7/9/2013 3:15:53 AM	R11809
Chloride	ND	10		mg/L	20	7/9/2013 3:15:53 AM	R11809
Nitrogen, Nitrite (As N)	ND	2.0		mg/L	20	7/9/2013 3:15:53 AM	R11809
Bromide	ND	2.0		mg/L	20	7/9/2013 3:15:53 AM	R11809
Nitrogen, Nitrate (As N)	ND	2.0		mg/L	20	7/9/2013 3:15:53 AM	R11809
Phosphorus, Orthophosphate (As P)	ND	10		mg/L	20	7/9/2013 3:15:53 AM	R11809
Sulfate	ND	10		mg/L	20	7/9/2013 3:15:53 AM	R11809
EPA METHOD 200.7: METALS						Analyst:	**JLF**
Calcium	ND	50		mg/L	1	7/11/2013 1:47:54 PM	8317
Magnesium	ND	50		mg/L	1	7/11/2013 1:47:54 PM	8317
Potassium	65	50		mg/L	1	7/11/2013 1:47:54 PM	8317
Sodium	100	50		mg/L	1	7/11/2013 1:47:54 PM	8317
SM4500-H+B: PH						Analyst:	**JML**
pH	7.04	1.68	H	pH units	1	7/12/2013 4:29:00 PM	R11906

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#: **1307269**
16-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of 102

Sample ID: **MB-8317** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **8317** RunNo: **11877**
Prep Date: **7/11/2013** Analysis Date: **7/11/2013** SeqNo: **337575** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID: **LCS-8317** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **8317** RunNo: **11877**
Prep Date: **7/11/2013** Analysis Date: **7/11/2013** SeqNo: **337576** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	99.4	85	115			
Magnesium	50	1.0	50.00	0	99.6	85	115			
Potassium	49	1.0	50.00	0	97.6	85	115			
Sodium	49	1.0	50.00	0	98.8	85	115			

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#: **1307269**
16-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of 102

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R11809** RunNo: **11809**
Prep Date: Analysis Date: **7/9/2013** SeqNo: **335617** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P)	ND	0.50								
Sulfate	ND	0.50								

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R11809** RunNo: **11809**
Prep Date: Analysis Date: **7/9/2013** SeqNo: **335618** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	107	90	110			
Chloride	4.8	0.50	5.000	0	95.5	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	95.5	90	110			
Bromide	2.5	0.10	2.500	0	99.0	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	100	90	110			
Phosphorus, Orthophosphate (As P)	4.8	0.50	5.000	0	95.3	90	110			
Sulfate	9.7	0.50	10.00	0	96.6	90	110			

Sample ID: **1307280-001AMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R11809** RunNo: **11809**
Prep Date: Analysis Date: **7/9/2013** SeqNo: **335622** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6427	96.1	76.9	114			
Chloride	11	0.50	5.000	5.375	105	89.9	119			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	96.6	84.3	102			
Bromide	2.6	0.10	2.500	0.08490	101	92	104			
Nitrogen, Nitrate (As N)	3.4	0.10	2.500	0.8637	103	93	113			
Phosphorus, Orthophosphate (As P)	4.9	0.50	5.000	0	98.6	73.9	120			
Sulfate	31	0.50	10.00	19.89	109	90.1	116			

Sample ID: **1307280-001AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R11809** RunNo: **11809**
Prep Date: Analysis Date: **7/9/2013** SeqNo: **335623** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6427	95.4	76.9	114	0.339	20	
Chloride	11	0.50	5.000	5.375	104	89.9	119	0.603	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307269**
16-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of 102

Sample ID: **1307280-001AMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R11809** RunNo: **11809**
Prep Date: Analysis Date: **7/9/2013** SeqNo: **335623** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	95.8	84.3	102	0.884	20	
Bromide	2.6	0.10	2.500	0.08490	101	92	104	0.398	20	
Nitrogen, Nitrate (As N)	3.4	0.10	2.500	0.8637	102	93	113	0.600	20	
Phosphorus, Orthophosphate (As P)	4.8	0.50	5.000	0	96.4	73.9	120	2.29	20	
Sulfate	31	0.50	10.00	19.89	106	90.1	116	0.814	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307269**
16-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of 102

Sample ID: **LCS-8285** SampType: **LCS** TestCode: **DRO by 8015D**
Client ID: **LCSW** Batch ID: **8285** RunNo: **11794**
Prep Date: **7/9/2013** Analysis Date: **7/9/2013** SeqNo: **335851** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	0.40	0.10	0.5000	0	80.5	80	120			
Surr: DNOP	0.040		0.05000		79.3	76.7	135			

Sample ID: **LCSD-8285** SampType: **LCSD** TestCode: **DRO by 8015D**
Client ID: **LCSS02** Batch ID: **8285** RunNo: **11794**
Prep Date: **7/9/2013** Analysis Date: **7/9/2013** SeqNo: **335852** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	0.43	0.10	0.5000	0	85.7	80	120	6.34	20	
Surr: DNOP	0.043		0.05000		85.8	76.7	135	0	0	

Sample ID: **MB-8285** SampType: **MBLK** TestCode: **DRO by 8015D**
Client ID: **PBW** Batch ID: **8285** RunNo: **11794**
Prep Date: **7/9/2013** Analysis Date: **7/9/2013** SeqNo: **335853** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	0.10								
Motor Oil Range Organics (MRO)	ND	0.50								
Surr: DNOP	0.082		0.1000		82.1	76.7	135			

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#: **1307269**
16-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of 102

Sample ID: **MB-8284** SampType: **MBLK** TestCode: **GRO by 8015D**
Client ID: **PBW** Batch ID: **8284** RunNo: **11829**
Prep Date: **7/9/2013** Analysis Date: **7/10/2013** SeqNo: **336360** 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	65.4	138			

Sample ID: **LCS-8284** SampType: **LCS** TestCode: **GRO by 8015D**
Client ID: **LCSW** Batch ID: **8284** RunNo: **11829**
Prep Date: **7/9/2013** Analysis Date: **7/10/2013** SeqNo: **336361** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	2.5	25.00	0	106	67.5	133			
Surr: BFB	1000		1000		99.7	65.4	138			

Sample ID: **LCSD-8284** SampType: **LCSD** TestCode: **GRO by 8015D**
Client ID: **LCSS02** Batch ID: **8284** RunNo: **11829**
Prep Date: **7/9/2013** Analysis Date: **7/10/2013** SeqNo: **336362** Units: **wt%**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	2.5	25.00	0	103	67.5	133	3.10	8.39	
Surr: BFB	1000		1000		101	65.4	138	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307269**
16-Jul-13

Client: Western Refining Southwest, Gallup
Project: Seep West of 102

Sample ID: **1307269-001ADUP** SampType: **DUP** TestCode: **SM4500-H+B: pH**
Client ID: **Seep Hole #6** Batch ID: **R11906** RunNo: **11906**
Prep Date: Analysis Date: **7/12/2013** SeqNo: **338410** Units: **pH units**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH	7.03	1.68						0.142		H

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

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: **1307269** RcptNo: **1**

Received by/date: LM 07/08/13

Logged By: **Ashley Gallegos** **7/8/2013 1:20:00 PM** AG

Completed By: **Ashley Gallegos** **7/8/2013 1:49:57 PM** AG

Reviewed By: IO 07/08/13

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? 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° 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? Yes ✔ No
    (Note discrepancies on chain of custody)
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? Yes ✔ No
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: -001A, -001B (<2 or >12 unless noted)

Adjusted? UNABLE TO BRING TO ACCEPTABLE pH - AK

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	Not Present			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

RT 3 BOX 7, GALLUP, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

Standard X Rush__ASAP__

Project Name:

Seep West of 102

Project #:

Seep Hole #6

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1307269	8260+MTBE	8015B GRO/DRO/ORO	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions		8021B + MTBE								Air Bubbles (Y or N)
7/8/2013	0945	Aqueous	Seep Hole #6			-001		X				X										

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/8/13	1000				
7/08/13	13:20			07/08/13	1320

Remarks:

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.

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

August 01, 2013

Cheryl Johnson

Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West of Tank 102 OrderNo.: 1307C30

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/26/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1307C30**
Date Reported: **8/1/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB18
Project: Seep West of Tank 102
Collection Date: 7/25/2013 1:30:00 PM
Lab ID: 1307C30-001
Matrix: AQUEOUS
Received Date: 7/26/2013 9:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	73	1.0		mg/L	1	7/29/2013 4:35:51 PM	8599
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/29/2013 4:35:51 PM	8599
Surr: DNOP	119	70.1-140		%REC	1	7/29/2013 4:35:51 PM	8599
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	73	10	P	mg/L	200	7/30/2013 4:17:20 AM	R12268
Surr: BFB	98.5	51.5-151	P	%REC	200	7/30/2013 4:17:20 AM	R12268

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB19
Project: Seep West of Tank 102
Collection Date: 7/25/2013 1:45:00 PM
Lab ID: 1307C30-002
Matrix: AQUEOUS
Received Date: 7/26/2013 9:07:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	30	1.0		mg/L	1	7/29/2013 4:57:45 PM	8599
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/29/2013 4:57:45 PM	8599
Surr: DNOP	127	70.1-140		%REC	1	7/29/2013 4:57:45 PM	8599
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	19	10		mg/L	200	7/30/2013 4:47:38 AM	R12268
Surr: BFB	93.8	51.5-151		%REC	200	7/30/2013 4:47:38 AM	R12268

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#: **1307C30**
01-Aug-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **MB-8599** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **8599** RunNo: **12239**
Prep Date: **7/29/2013** Analysis Date: **7/29/2013** SeqNo: **348455** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		113	70.1	140			

Sample ID **LCS-8599** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **8599** RunNo: **12239**
Prep Date: **7/29/2013** Analysis Date: **7/29/2013** SeqNo: **348473** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.2	1.0	5.000	0	105	89.1	151			
Surr: DNOP	0.42		0.5000		84.7	70.1	140			

Sample ID **LCSD-8599** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **8599** RunNo: **12239**
Prep Date: **7/29/2013** Analysis Date: **7/29/2013** SeqNo: **348474** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.3	1.0	5.000	0	106	89.1	151	1.59	20	
Surr: DNOP	0.44		0.5000		88.4	70.1	140	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307C30**
01-Aug-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**		
Client ID:	**PBW**	Batch ID:	**R12268**	RunNo:	**12268**		
Prep Date:		Analysis Date:	**7/29/2013**	SeqNo:	**348886**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		92.3	51.5	151			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**		
Client ID:	**LCSW**	Batch ID:	**R12268**	RunNo:	**12268**		
Prep Date:		Analysis Date:	**7/29/2013**	SeqNo:	**348887**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	103	80	120			
Surr: BFB	20		20.00		99.1	51.5	151			

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

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Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1307C30 RcptNo: 1

Received by/date: MG 07/26/13

Logged By: Anne Thorne 7/26/2013 9:07:00 AM Anne Thorne

Completed By: Anne Thorne 7/26/2013 Anne Thorne

Reviewed By: 07/29/13

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
Phone #: 505-722-3833
email or Fax#: 505-863-0930
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush
Project Name: SEEP WEST OF TANK 102
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1307C30	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
7-25-13	1330	GW	SB18	3 40mL VOA	HCL	-001			X												
↓	1345	GW	SB19	↓	HCL	-002			X												

Date	Time	Relinquished by:	Received by:	Date	Time
7/26/13	0907	RPS	[signature]	07/26/13	0907
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

November 05, 2013

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West Of Tank 102 OrderNo.: 1310D69

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/29/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1310D69**
Date Reported: **11/5/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB14
Project: Seep West Of Tank 102
Collection Date: 10/28/2013 9:15:00 AM
Lab ID: 1310D69-001
Matrix: AQUEOUS
Received Date: 10/29/2013 12:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	87	10		mg/L	10	10/30/2013 3:43:44 PM	10098
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	10/30/2013 3:43:44 PM	10098
Surr: DNOP	0	70.1-140	S	%REC	10	10/30/2013 3:43:44 PM	10098
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	71	5.0		mg/L	100	11/1/2013 12:42:12 AM	R14497
Surr: BFB	102	51.5-151		%REC	100	11/1/2013 12:42:12 AM	R14497
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	460	250		µg/L	100	11/1/2013 12:42:12 AM	R14497
Benzene	12000	500		µg/L	500	11/4/2013 2:45:47 PM	R14541
Toluene	14000	500		µg/L	500	11/4/2013 2:45:47 PM	R14541
Ethylbenzene	960	100		µg/L	100	11/1/2013 12:42:12 AM	R14497
Xylenes, Total	4700	200		µg/L	100	11/1/2013 12:42:12 AM	R14497
1,2,4-Trimethylbenzene	590	100		µg/L	100	11/1/2013 12:42:12 AM	R14497
1,3,5-Trimethylbenzene	150	100		µg/L	100	11/1/2013 12:42:12 AM	R14497
Surr: 4-Bromofluorobenzene	110	85-136		%REC	100	11/1/2013 12:42:12 AM	R14497

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB15
Project: Seep West Of Tank 102
Collection Date: 10/28/2013 9:35:00 AM
Lab ID: 1310D69-002
Matrix: AQUEOUS
Received Date: 10/29/2013 12:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	4.8	1.0		mg/L	1	10/30/2013 2:37:42 PM	10098
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/30/2013 2:37:42 PM	10098
Surr: DNOP	117	70.1-140		%REC	1	10/30/2013 2:37:42 PM	10098
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	46	5.0		mg/L	100	11/1/2013 1:12:29 AM	R14497
Surr: BFB	100	51.5-151		%REC	100	11/1/2013 1:12:29 AM	R14497
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	890	250		µg/L	100	11/1/2013 1:12:29 AM	R14497
Benzene	7300	100		µg/L	100	11/1/2013 1:12:29 AM	R14497
Toluene	7600	100		µg/L	100	11/1/2013 1:12:29 AM	R14497
Ethylbenzene	920	100		µg/L	100	11/1/2013 1:12:29 AM	R14497
Xylenes, Total	4600	200		µg/L	100	11/1/2013 1:12:29 AM	R14497
1,2,4-Trimethylbenzene	790	100		µg/L	100	11/1/2013 1:12:29 AM	R14497
1,3,5-Trimethylbenzene	220	100		µg/L	100	11/1/2013 1:12:29 AM	R14497
Surr: 4-Bromofluorobenzene	109	85-136		%REC	100	11/1/2013 1:12:29 AM	R14497

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB12
Project: Seep West Of Tank 102
Collection Date: 10/28/2013 10:00:00 AM
Lab ID: 1310D69-003
Matrix: AQUEOUS
Received Date: 10/29/2013 12:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	110	10		mg/L	10	10/30/2013 4:05:46 PM	10098
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	10/30/2013 4:05:46 PM	10098
Surr: DNOP	0	70.1-140	S	%REC	10	10/30/2013 4:05:46 PM	10098
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	22	5.0		mg/L	100	11/1/2013 1:42:43 AM	R14497
Surr: BFB	99.7	51.5-151		%REC	100	11/1/2013 1:42:43 AM	R14497
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	3500	250		µg/L	100	11/1/2013 1:42:43 AM	R14497
Benzene	2600	100		µg/L	100	11/1/2013 1:42:43 AM	R14497
Toluene	130	100		µg/L	100	11/1/2013 1:42:43 AM	R14497
Ethylbenzene	820	100		µg/L	100	11/1/2013 1:42:43 AM	R14497
Xylenes, Total	3000	200		µg/L	100	11/1/2013 1:42:43 AM	R14497
1,2,4-Trimethylbenzene	870	100		µg/L	100	11/1/2013 1:42:43 AM	R14497
1,3,5-Trimethylbenzene	260	100		µg/L	100	11/1/2013 1:42:43 AM	R14497
Surr: 4-Bromofluorobenzene	108	85-136		%REC	100	11/1/2013 1:42:43 AM	R14497

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB07
Project: Seep West Of Tank 102
Collection Date: 10/28/2013 10:20:00 AM
Lab ID: 1310D69-004
Matrix: AQUEOUS
Received Date: 10/29/2013 12:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	24	1.0		mg/L	1	10/30/2013 4:27:56 PM	10098
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/30/2013 4:27:56 PM	10098
Surr: DNOP	124	70.1-140		%REC	1	10/30/2013 4:27:56 PM	10098
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	21	5.0		mg/L	100	11/1/2013 2:13:02 AM	R14497
Surr: BFB	100	51.5-151		%REC	100	11/1/2013 2:13:02 AM	R14497
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	4500	250		µg/L	100	11/1/2013 2:13:02 AM	R14497
Benzene	3200	100		µg/L	100	11/1/2013 2:13:02 AM	R14497
Toluene	ND	100		µg/L	100	11/1/2013 2:13:02 AM	R14497
Ethylbenzene	1200	100		µg/L	100	11/1/2013 2:13:02 AM	R14497
Xylenes, Total	1600	200		µg/L	100	11/1/2013 2:13:02 AM	R14497
1,2,4-Trimethylbenzene	1000	100		µg/L	100	11/1/2013 2:13:02 AM	R14497
1,3,5-Trimethylbenzene	160	100		µg/L	100	11/1/2013 2:13:02 AM	R14497
Surr: 4-Bromofluorobenzene	109	85-136		%REC	100	11/1/2013 2:13:02 AM	R14497

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: HA3
Project: Seep West Of Tank 102
Collection Date: 10/28/2013 10:40:00 AM
Lab ID: 1310D69-005
Matrix: AQUEOUS
Received Date: 10/29/2013 12:29:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/30/2013 4:49:51 PM	10098
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/30/2013 4:49:51 PM	10098
Surr: DNOP	118	70.1-140		%REC	1	10/30/2013 4:49:51 PM	10098
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	3.8	1.0		mg/L	20	11/1/2013 2:43:15 AM	R14497
Surr: BFB	98.6	51.5-151		%REC	20	11/1/2013 2:43:15 AM	R14497
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	11/1/2013 2:43:15 AM	R14497
Benzene	690	20		µg/L	20	11/1/2013 2:43:15 AM	R14497
Toluene	ND	20		µg/L	20	11/1/2013 2:43:15 AM	R14497
Ethylbenzene	55	20		µg/L	20	11/1/2013 2:43:15 AM	R14497
Xylenes, Total	160	40		µg/L	20	11/1/2013 2:43:15 AM	R14497
1,2,4-Trimethylbenzene	190	20		µg/L	20	11/1/2013 2:43:15 AM	R14497
1,3,5-Trimethylbenzene	26	20		µg/L	20	11/1/2013 2:43:15 AM	R14497
Surr: 4-Bromofluorobenzene	107	85-136		%REC	20	11/1/2013 2:43:15 AM	R14497

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1310D69**
05-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **MB-10098** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **10098** RunNo: **14432**
Prep Date: **10/30/2013** Analysis Date: **10/30/2013** SeqNo: **415120** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		115	70.1	140			

Sample ID **LCS-10098** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **10098** RunNo: **14432**
Prep Date: **10/30/2013** Analysis Date: **10/30/2013** SeqNo: **415196** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	113	73.3	145			
Surr: DNOP	0.55		0.5000		111	70.1	140			

Sample ID **LCSD-10098** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **10098** RunNo: **14432**
Prep Date: **10/30/2013** Analysis Date: **10/30/2013** SeqNo: **415197** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	120	73.3	145	5.65	20	
Surr: DNOP	0.57		0.5000		113	70.1	140	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#: **1310D69**
05-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R14497** RunNo: **14497**
Prep Date: Analysis Date: **10/31/2013** SeqNo: **416401** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		92.8	51.5	151			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R14497** RunNo: **14497**
Prep Date: Analysis Date: **10/31/2013** SeqNo: **416402** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	100	80	120			
Surr: BFB	20		20.00		101	51.5	151			

Sample ID **B7** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418164** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	19		20.00		93.8	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418165** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	21		20.00		104	80.4	118			

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#: **1310D69**
05-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R14497** RunNo: **14497**
Prep Date: Analysis Date: **10/31/2013** SeqNo: **416431** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	20		20.00		102	85	136			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R14497** RunNo: **14497**
Prep Date: Analysis Date: **10/31/2013** SeqNo: **416432** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19	2.5	20.00	0	94.0	76.8	124			
Benzene	18	1.0	20.00	0	91.2	80	120			
Toluene	18	1.0	20.00	0	92.0	80	120			
Ethylbenzene	19	1.0	20.00	0	94.2	80	120			
Xylenes, Total	58	2.0	60.00	0	96.0	80	120			
1,2,4-Trimethylbenzene	19	1.0	20.00	0	96.0	80	120			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	85	136			

Sample ID **B7** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418215** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Surr: 4-Bromofluorobenzene	20		20.00		102	85	136			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418216** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		108	85	136			

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

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: 1310D69 RcptNo: 1

Received by/date: AG 10/29/13

Logged By: **Lindsay Mangin** 10/29/2013 12:29:00 PM

Completed By: **Lindsay Mangin** 10/29/2013 1:17:35 PM

Reviewed By: AT 10/30/13

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? 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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	2.9	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
JAMESTOWN, NM 87301
Phone #: 505-722-3833
email or Fax#: 505-863-0930
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SEEP WEST OF TANK 102
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.9

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1310D69	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX & TPH (GRO DRO MRO)			Air Bubbles (Y or N)
10-28-13	0915	GW	SB14	4 40mL VOA	HCL/NEAT	-001												✓			
	0935		SB15			-002												✓			
	1000		SB12			-003												✓			
	1020		SB07			-004												✓			
	1040		HA3			-005												✓			

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/29/13	7:10	[signature]	[signature]	10/29/13	1229
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

November 11, 2013

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West of Tank 102 OrderNo.: 1311243

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/7/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1311243**
Date Reported: **11/11/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB35
Project: Seep West of Tank 102
Collection Date: 11/5/2013 4:30:00 PM
Lab ID: 1311243-001
Matrix: AQUEOUS
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	7.2	1.0		mg/L	1	11/7/2013 11:16:56 PM	10231
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/7/2013 11:16:56 PM	10231
Surr: DNOP	105	70.1-140		%REC	1	11/7/2013 11:16:56 PM	10231
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	10	2.5		mg/L	50	11/7/2013 2:47:40 PM	R14637
Surr: BFB	100	80.4-118		%REC	50	11/7/2013 2:47:40 PM	R14637
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	640	50		µg/L	50	11/7/2013 2:47:40 PM	R14637
Toluene	140	50		µg/L	50	11/7/2013 2:47:40 PM	R14637
Ethylbenzene	470	50		µg/L	50	11/7/2013 2:47:40 PM	R14637
Xylenes, Total	1100	100		µg/L	50	11/7/2013 2:47:40 PM	R14637
Surr: 4-Bromofluorobenzene	100	85-136		%REC	50	11/7/2013 2:47:40 PM	R14637

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB25
Project: Seep West of Tank 102
Collection Date: 11/5/2013 4:50:00 PM
Lab ID: 1311243-002
Matrix: AQUEOUS
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	11/7/2013 11:47:37 PM	10231
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/7/2013 11:47:37 PM	10231
Surr: DNOP	91.9	70.1-140		%REC	1	11/7/2013 11:47:37 PM	10231
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	12	1.0		mg/L	20	11/7/2013 3:18:00 PM	R14637
Surr: BFB	103	80.4-118		%REC	20	11/7/2013 3:18:00 PM	R14637
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	920	20		µg/L	20	11/7/2013 3:18:00 PM	R14637
Toluene	1000	20		µg/L	20	11/7/2013 3:18:00 PM	R14637
Ethylbenzene	230	20		µg/L	20	11/7/2013 3:18:00 PM	R14637
Xylenes, Total	660	40		µg/L	20	11/7/2013 3:18:00 PM	R14637
Surr: 4-Bromofluorobenzene	106	85-136		%REC	20	11/7/2013 3:18:00 PM	R14637

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB24
Project: Seep West of Tank 102
Collection Date: 11/5/2013 5:00:00 PM
Lab ID: 1311243-003
Matrix: AQUEOUS
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/8/2013 12:17:47 AM	10231
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/8/2013 12:17:47 AM	10231
Surr: DNOP	111	70.1-140		%REC	1	11/8/2013 12:17:47 AM	10231
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	5.7	1.0		mg/L	20	11/8/2013 11:43:44 AM	R14677
Surr: BFB	100	80.4-118		%REC	20	11/8/2013 11:43:44 AM	R14677
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	490	20		µg/L	20	11/8/2013 11:43:44 AM	R14677
Toluene	360	20		µg/L	20	11/8/2013 11:43:44 AM	R14677
Ethylbenzene	190	20		µg/L	20	11/8/2013 11:43:44 AM	R14677
Xylenes, Total	900	40		µg/L	20	11/8/2013 11:43:44 AM	R14677
Surr: 4-Bromofluorobenzene	107	85-136		%REC	20	11/8/2013 11:43:44 AM	R14677

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1311243**
11-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **MB-10231** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **10231** RunNo: **14632**
Prep Date: **11/7/2013** Analysis Date: **11/7/2013** SeqNo: **421796** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.75		1.000		74.6	70.1	140			

Sample ID **LCS-10231** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **10231** RunNo: **14632**
Prep Date: **11/7/2013** Analysis Date: **11/7/2013** SeqNo: **421797** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.1	1.0	5.000	0	121	73.3	145			
Surr: DNOP	0.56		0.5000		112	70.1	140			

Sample ID **LCSD-10231** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **10231** RunNo: **14632**
Prep Date: **11/7/2013** Analysis Date: **11/7/2013** SeqNo: **421798** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.3	1.0	5.000	0	126	73.3	145	3.38	20	
Surr: DNOP	0.56		0.5000		113	70.1	140	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#: **1311243**
11-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **B16** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421434** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		94.1	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421435** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	100	80	120			
Surr: BFB	21		20.00		103	80.4	118			

Sample ID **1311243-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB35** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421440** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	2.5	25.00	10.11	88.9	67.7	128			
Surr: BFB	1100		1000		107	80.4	118			

Sample ID **1311243-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB35** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421441** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	2.5	25.00	10.11	85.9	67.7	128	2.32	20	
Surr: BFB	1100		1000		107	80.4	118	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R14677** RunNo: **14677**
Prep Date: Analysis Date: **11/8/2013** SeqNo: **422469** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		93.8	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R14677** RunNo: **14677**
Prep Date: Analysis Date: **11/8/2013** SeqNo: **422471** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1311243**
11-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R14677**	RunNo:	**14677**
Prep Date:		Analysis Date:	**11/8/2013**	SeqNo:	**422471** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	80	120			
Surr: BFB	21		20.00		103	80.4	118			

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#: **1311243**
11-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **B16** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421467** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		93.5	85	136			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421468** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.5	80	120			
Toluene	18	1.0	20.00	0	91.3	80	120			
Ethylbenzene	18	1.0	20.00	0	91.0	80	120			
Xylenes, Total	56	2.0	60.00	0	94.0	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		107	85	136			

Sample ID **1311243-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB35** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421474** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1600	50	1000	640.9	93.0	73.4	119			
Toluene	1000	50	1000	136.8	87.9	80	120			
Ethylbenzene	1400	50	1000	466.1	94.0	80	120			
Xylenes, Total	3900	100	3000	1090	92.6	80	120			
Surr: 4-Bromofluorobenzene	1100		1000		108	85	136			

Sample ID **1311243-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB35** Batch ID: **R14637** RunNo: **14637**
Prep Date: Analysis Date: **11/7/2013** SeqNo: **421475** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1600	50	1000	640.9	91.2	73.4	119	1.09	20	
Toluene	1000	50	1000	136.8	86.8	80	120	1.08	20	
Ethylbenzene	1400	50	1000	466.1	92.8	80	120	0.886	20	
Xylenes, Total	3800	100	3000	1090	91.2	80	120	1.14	20	
Surr: 4-Bromofluorobenzene	1100		1000		112	85	136	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#: **1311243**
11-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**PBW**	Batch ID:	**R14677**	RunNo:	**14677**
Prep Date:		Analysis Date:	**11/8/2013**	SeqNo:	**422474** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	20		20.00		102	85	136			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**
Client ID:	**LCSW**	Batch ID:	**R14677**	RunNo:	**14677**
Prep Date:		Analysis Date:	**11/8/2013**	SeqNo:	**422475** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.3	80	120			
Toluene	20	1.0	20.00	0	98.7	80	120			
Ethylbenzene	20	1.0	20.00	0	99.8	80	120			
Xylenes, Total	61	2.0	60.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		106	85	136			

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

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: 1311243 RcptNo: 1

Received by/date: LM 11/07/13

Logged By: **Michelle Garcia** 11/7/2013 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 11/7/2013 8:52:45 AM Michelle Garcia

Reviewed By: IO 11/07/13

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.1	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
JAMESTOWN, NM 87301
Phone #: 505-722-3833
email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush _____
Project Name: SEEP WEST OF TANK 102
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.1

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311243	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX			Air Bubbles (Y or N)
11/5/13	1630	GW	SB35	4/40mL Vols	HCL/NEAT	-001			✓									✓			
↓	1650	↓	SB25	↓	↓	-002			✓									✓			
↓	1700	↓	SB24	↓	↓	-003			✓									✓			

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/6/13	0700	[signature]	[signature]	11/07/13	0800
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

November 27, 2013

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West of Tank 102 OrderNo.: 1311905

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/20/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1311905**
Date Reported: **11/27/2013**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB32
Project: Seep West of Tank 102
Collection Date: 11/19/2013 9:30:00 AM
Lab ID: 1311905-001
Matrix: AQUEOUS
Received Date: 11/20/2013 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	4.2	1.0		mg/L	1	11/25/2013 4:45:18 PM	10460
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2013 4:45:18 PM	10460
Surr: DNOP	113	70.1-140		%REC	1	11/25/2013 4:45:18 PM	10460
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	68	2.5		mg/L	50	11/22/2013 6:09:44 PM	R15041
Surr: BFB	106	80.4-118		%REC	50	11/22/2013 6:09:44 PM	R15041
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	9900	500		µg/L	500	11/25/2013 4:03:31 PM	R15067
Toluene	8200	500		µg/L	500	11/25/2013 4:03:31 PM	R15067
Ethylbenzene	1900	50		µg/L	50	11/22/2013 6:09:44 PM	R15041
Xylenes, Total	9800	100		µg/L	50	11/22/2013 6:09:44 PM	R15041
Surr: 4-Bromofluorobenzene	117	85-136		%REC	50	11/22/2013 6:09:44 PM	R15041

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB33
Project: Seep West of Tank 102
Collection Date: 11/19/2013 10:15:00 AM
Lab ID: 1311905-002
Matrix: AQUEOUS
Received Date: 11/20/2013 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	5.8	1.0		mg/L	1	11/25/2013 5:07:17 PM	10460
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2013 5:07:17 PM	10460
Surr: DNOP	116	70.1-140		%REC	1	11/25/2013 5:07:17 PM	10460
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	17	2.5		mg/L	50	11/22/2013 6:39:50 PM	R15041
Surr: BFB	104	80.4-118		%REC	50	11/22/2013 6:39:50 PM	R15041
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	1800	50		µg/L	50	11/22/2013 6:39:50 PM	R15041
Toluene	1600	50		µg/L	50	11/22/2013 6:39:50 PM	R15041
Ethylbenzene	710	50		µg/L	50	11/22/2013 6:39:50 PM	R15041
Xylenes, Total	2700	100		µg/L	50	11/22/2013 6:39:50 PM	R15041
Surr: 4-Bromofluorobenzene	116	85-136		%REC	50	11/22/2013 6:39:50 PM	R15041

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB23
Project: Seep West of Tank 102
Collection Date: 11/19/2013 10:50:00 AM
Lab ID: 1311905-003
Matrix: AQUEOUS
Received Date: 11/20/2013 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.1	1.0		mg/L	1	11/25/2013 5:29:07 PM	10460
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2013 5:29:07 PM	10460
Surr: DNOP	109	70.1-140		%REC	1	11/25/2013 5:29:07 PM	10460
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	6.5	0.25		mg/L	5	11/25/2013 4:33:48 PM	R15067
Surr: BFB	107	80.4-118		%REC	5	11/25/2013 4:33:48 PM	R15067
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	1300	50		µg/L	50	11/22/2013 7:09:53 PM	R15041
Toluene	7.5	5.0		µg/L	5	11/25/2013 4:33:48 PM	R15067
Ethylbenzene	72	5.0		µg/L	5	11/25/2013 4:33:48 PM	R15067
Xylenes, Total	16	10		µg/L	5	11/25/2013 4:33:48 PM	R15067
Surr: 4-Bromofluorobenzene	113	85-136		%REC	5	11/25/2013 4:33:48 PM	R15067

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB30
Project: Seep West of Tank 102
Collection Date: 11/19/2013 12:15:00 PM
Lab ID: 1311905-004
Matrix: AQUEOUS
Received Date: 11/20/2013 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/25/2013 5:51:04 PM	10460
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2013 5:51:04 PM	10460
Surr: DNOP	114	70.1-140		%REC	1	11/25/2013 5:51:04 PM	10460
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/25/2013 5:34:09 PM	R15067
Surr: BFB	100	80.4-118		%REC	1	11/25/2013 5:34:09 PM	R15067
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/25/2013 5:34:09 PM	R15067
Toluene	ND	1.0		µg/L	1	11/25/2013 5:34:09 PM	R15067
Ethylbenzene	ND	1.0		µg/L	1	11/25/2013 5:34:09 PM	R15067
Xylenes, Total	ND	2.0		µg/L	1	11/25/2013 5:34:09 PM	R15067
Surr: 4-Bromofluorobenzene	108	85-136		%REC	1	11/25/2013 5:34:09 PM	R15067

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB34
Project: Seep West of Tank 102
Collection Date: 11/19/2013 1:15:00 PM
Lab ID: 1311905-005
Matrix: AQUEOUS
Received Date: 11/20/2013 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	11	1.0		mg/L	1	11/25/2013 6:12:56 PM	10460
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2013 6:12:56 PM	10460
Surr: DNOP	120	70.1-140		%REC	1	11/25/2013 6:12:56 PM	10460
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	4.0	2.5		mg/L	50	11/22/2013 8:10:07 PM	R15041
Surr: BFB	102	80.4-118		%REC	50	11/22/2013 8:10:07 PM	R15041
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	330	50		µg/L	50	11/22/2013 8:10:07 PM	R15041
Toluene	370	50		µg/L	50	11/22/2013 8:10:07 PM	R15041
Ethylbenzene	130	50		µg/L	50	11/22/2013 8:10:07 PM	R15041
Xylenes, Total	470	100		µg/L	50	11/22/2013 8:10:07 PM	R15041
Surr: 4-Bromofluorobenzene	108	85-136		%REC	50	11/22/2013 8:10:07 PM	R15041

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1311905**
27-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **MB-10460** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **10460** RunNo: **15015**
Prep Date: **11/21/2013** Analysis Date: **11/25/2013** SeqNo: **434392** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		107	70.1	140			

Sample ID **LCS-10460** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **10460** RunNo: **15015**
Prep Date: **11/21/2013** Analysis Date: **11/25/2013** SeqNo: **434404** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.3	1.0	5.000	0	106	73.3	145			
Surr: DNOP	0.52		0.5000		104	70.1	140			

Sample ID **LCSD-10460** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **10460** RunNo: **15015**
Prep Date: **11/21/2013** Analysis Date: **11/25/2013** SeqNo: **434671** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.1	1.0	5.000	0	122	73.3	145	13.9	20	
Surr: DNOP	0.59		0.5000		118	70.1	140	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#: **1311905**
27-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **5ML-RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R15041** RunNo: **15041**
Prep Date: Analysis Date: **11/22/2013** SeqNo: **434271** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		97.6	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R15041** RunNo: **15041**
Prep Date: Analysis Date: **11/22/2013** SeqNo: **434272** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	80	120			
Surr: BFB	21		20.00		107	80.4	118			

Sample ID **5ML-RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R15067** RunNo: **15067**
Prep Date: Analysis Date: **11/25/2013** SeqNo: **434884** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	21		20.00		106	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R15067** RunNo: **15067**
Prep Date: Analysis Date: **11/25/2013** SeqNo: **434885** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	87.1	80	120			
Surr: BFB	21		20.00		106	80.4	118			

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#: **1311905**
27-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **5ML-RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R15041** RunNo: **15041**
Prep Date: Analysis Date: **11/22/2013** SeqNo: **434285** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	22		20.00		108	85	136			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R15041** RunNo: **15041**
Prep Date: Analysis Date: **11/22/2013** SeqNo: **434286** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.8	80	120			
Toluene	19	1.0	20.00	0	94.6	80	120			
Ethylbenzene	19	1.0	20.00	0	95.1	80	120			
Xylenes, Total	58	2.0	60.00	0	96.0	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		112	85	136			

Sample ID **5ML-RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R15067** RunNo: **15067**
Prep Date: Analysis Date: **11/25/2013** SeqNo: **434905** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	24		20.00		118	85	136			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R15067** RunNo: **15067**
Prep Date: Analysis Date: **11/25/2013** SeqNo: **434906** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.1	80	120			
Toluene	19	1.0	20.00	0	95.2	80	120			
Ethylbenzene	19	1.0	20.00	0	94.0	80	120			
Xylenes, Total	58	2.0	60.00	0	96.5	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		110	85	136			

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

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: **1311905** RcptNo: 1

Received by/date: LM 11/20/13

Logged By: **Anne Thorne** 11/20/2013 9:40:00 AM Anne Thorne

Completed By: **Anne Thorne** 11/20/2013 Anne Thorne

Reviewed By: IO 11/21/2013

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
JAMESTOWN, NM 87301
Phone #: 505-722.3833
email or Fax#: CHERYL.JOHNSON.WNR.COM
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____
Project Name: SEEP WEST OF TANK 102
Project #:
Project Manager: CHERYL JOHNSON
Sampler: L. PAYNE
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311905	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX				Air Bubbles (Y or N)
11/19/13	0930	GW	~~SB32~~ SB32	4 40ml VOA	HCL & NEAT	001			X									X				
	1015		SB33			002			X									X				
	1050		SB23			003			X									X				
	1215		SB30			004			X									X				
	1315		SB34			005			X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
11.20.13	0940			11/20/13	0940
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

November 06, 2013

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West of Tank 102 OrderNo.: 1311044

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/2/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1311044**
Date Reported: **11/6/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB26
Project: Seep West of Tank 102
Collection Date: 11/1/2013 1:45:00 PM
Lab ID: 1311044-001
Matrix: AQUEOUS
Received Date: 11/2/2013 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.5	1.0		mg/L	1	11/5/2013 12:04:38 PM	10156
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/5/2013 12:04:38 PM	10156
Surr: DNOP	135	70.1-140		%REC	1	11/5/2013 12:04:38 PM	10156
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	8.4	1.0		mg/L	20	11/4/2013 3:16:02 PM	R14541
Surr: BFB	116	80.4-118		%REC	20	11/4/2013 3:16:02 PM	R14541
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	1200	20		µg/L	20	11/4/2013 3:16:02 PM	R14541
Toluene	ND	20		µg/L	20	11/4/2013 3:16:02 PM	R14541
Ethylbenzene	230	20		µg/L	20	11/4/2013 3:16:02 PM	R14541
Xylenes, Total	ND	40		µg/L	20	11/4/2013 3:16:02 PM	R14541
Surr: 4-Bromofluorobenzene	113	85-136		%REC	20	11/4/2013 3:16:02 PM	R14541

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB27
Project: Seep West of Tank 102
Collection Date: 11/1/2013 1:55:00 PM
Lab ID: 1311044-002
Matrix: AQUEOUS
Received Date: 11/2/2013 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	5.8	1.0		mg/L	1	11/5/2013 12:35:50 PM	10156
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/5/2013 12:35:50 PM	10156
Surr: DNOP	139	70.1-140		%REC	1	11/5/2013 12:35:50 PM	10156
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	37	2.5		mg/L	50	11/4/2013 12:14:33 PM	R14541
Surr: BFB	105	80.4-118		%REC	50	11/4/2013 12:14:33 PM	R14541
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	1800	50		µg/L	50	11/4/2013 12:14:33 PM	R14541
Toluene	200	50		µg/L	50	11/4/2013 12:14:33 PM	R14541
Ethylbenzene	1500	50		µg/L	50	11/4/2013 12:14:33 PM	R14541
Xylenes, Total	6400	100		µg/L	50	11/4/2013 12:14:33 PM	R14541
Surr: 4-Bromofluorobenzene	110	85-136		%REC	50	11/4/2013 12:14:33 PM	R14541

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB28
Project: Seep West of Tank 102
Collection Date: 11/1/2013 2:10:00 PM
Lab ID: 1311044-003
Matrix: AQUEOUS
Received Date: 11/2/2013 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.4	1.0		mg/L	1	11/5/2013 1:07:02 PM	10156
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/5/2013 1:07:02 PM	10156
Surr: DNOP	121	70.1-140		%REC	1	11/5/2013 1:07:02 PM	10156
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	8.4	1.0		mg/L	20	11/4/2013 3:46:06 PM	R14541
Surr: BFB	116	80.4-118		%REC	20	11/4/2013 3:46:06 PM	R14541
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	1400	20		µg/L	20	11/4/2013 3:46:06 PM	R14541
Toluene	ND	20		µg/L	20	11/4/2013 3:46:06 PM	R14541
Ethylbenzene	160	20		µg/L	20	11/4/2013 3:46:06 PM	R14541
Xylenes, Total	ND	40		µg/L	20	11/4/2013 3:46:06 PM	R14541
Surr: 4-Bromofluorobenzene	115	85-136		%REC	20	11/4/2013 3:46:06 PM	R14541

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB29
Project: Seep West of Tank 102
Collection Date: 11/1/2013 2:20:00 PM
Lab ID: 1311044-004
Matrix: AQUEOUS
Received Date: 11/2/2013 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/5/2013 1:37:45 PM	10156
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/5/2013 1:37:45 PM	10156
Surr: DNOP	135	70.1-140		%REC	1	11/5/2013 1:37:45 PM	10156
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.7	0.050		mg/L	1	11/4/2013 1:15:02 PM	R14541
Surr: BFB	192	80.4-118	S	%REC	1	11/4/2013 1:15:02 PM	R14541
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	570	10		µg/L	10	11/4/2013 4:16:22 PM	R14541
Toluene	8.0	1.0		µg/L	1	11/4/2013 1:15:02 PM	R14541
Ethylbenzene	150	10		µg/L	10	11/4/2013 4:16:22 PM	R14541
Xylenes, Total	2.0	2.0		µg/L	1	11/4/2013 1:15:02 PM	R14541
Surr: 4-Bromofluorobenzene	153	85-136	S	%REC	1	11/4/2013 1:15:02 PM	R14541

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB31
Project: Seep West of Tank 102
Collection Date: 11/1/2013 2:35:00 PM
Lab ID: 1311044-005
Matrix: AQUEOUS
Received Date: 11/2/2013 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.4	1.0		mg/L	1	11/5/2013 2:08:31 PM	10156
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/5/2013 2:08:31 PM	10156
Surr: DNOP	120	70.1-140		%REC	1	11/5/2013 2:08:31 PM	10156
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	65	2.5		mg/L	50	11/4/2013 1:45:17 PM	R14541
Surr: BFB	106	80.4-118		%REC	50	11/4/2013 1:45:17 PM	R14541
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	12000	200		µg/L	200	11/4/2013 11:49:30 PM	R14541
Toluene	12000	200		µg/L	200	11/4/2013 11:49:30 PM	R14541
Ethylbenzene	1500	50		µg/L	50	11/4/2013 1:45:17 PM	R14541
Xylenes, Total	4800	100		µg/L	50	11/4/2013 1:45:17 PM	R14541
Surr: 4-Bromofluorobenzene	113	85-136		%REC	50	11/4/2013 1:45:17 PM	R14541

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1311044**
06-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **MB-10156** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **10156** RunNo: **14573**
Prep Date: **11/4/2013** Analysis Date: **11/5/2013** SeqNo: **418892** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		117	70.1	140			

Sample ID **LCS-10156** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **10156** RunNo: **14573**
Prep Date: **11/4/2013** Analysis Date: **11/5/2013** SeqNo: **418893** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	7.0	1.0	5.000	0	140	73.3	145			
Surr: DNOP	0.61		0.5000		121	70.1	140			

Sample ID **LCSD-10156** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **10156** RunNo: **14573**
Prep Date: **11/4/2013** Analysis Date: **11/5/2013** SeqNo: **418894** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	119	73.3	145	15.6	20	
Surr: DNOP	0.52		0.5000		103	70.1	140	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#: **1311044**
06-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **B7** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418164** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		93.8	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418165** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.7	80	120			
Surr: BFB	21		20.00		104	80.4	118			

Sample ID **1311044-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB26** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418172** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	1.0	10.00	8.436	91.4	67.7	128			
Surr: BFB	490		400.0		122	80.4	118			S

Sample ID **1311044-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB26** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418173** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	1.0	10.00	8.436	88.0	67.7	128	2.00	20	
Surr: BFB	470		400.0		118	80.4	118	0	0	S

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#: **1311044**
06-Nov-13

Client: Western Refining Southwest, Gallup
Project: Seep West of Tank 102

Sample ID **B7** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418215** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	20		20.00		102	85	136			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418216** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		108	85	136			

Sample ID **1311044-002AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB27** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418223** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2900	50	1000	1764	109	73.4	119			
Toluene	1200	50	1000	201.5	100	80	120			
Ethylbenzene	2600	50	1000	1526	107	80	120			
Xylenes, Total	9500	100	3000	6401	105	80	120			
Surr: 4-Bromofluorobenzene	1100		1000		114	85	136			

Sample ID **1311044-002AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB27** Batch ID: **R14541** RunNo: **14541**
Prep Date: Analysis Date: **11/4/2013** SeqNo: **418224** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2800	50	1000	1764	108	73.4	119	0.260	20	
Toluene	1200	50	1000	201.5	101	80	120	0.497	20	
Ethylbenzene	2600	50	1000	1526	107	80	120	0.262	20	
Xylenes, Total	9600	100	3000	6401	105	80	120	0.0701	20	
Surr: 4-Bromofluorobenzene	1100		1000		114	85	136	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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1311044 RcptNo: 1

Received by/date: AF 11/02/13

Logged By: **Michelle Garcia** 11/2/2013 8:55:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 11/4/2013 8:34:11 AM Michelle Garcia

Reviewed By: 11/04/13

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? 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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.2	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
JAMESTOWN NM 87301
Phone #: 505-722-3833
email or Fax#: 505.863.0930
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

☐ Standard ☒ Rush 24hr
Project Name: SEEP WEST OF TANK 102
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.2°C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311044	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX				Air Bubbles (Y or N)
11/13	1345	GW	SB26	4-40mL VOA	HCL & NEAT	-001			✓									✓				
	1355		SB27			-002			✓									✓				
	1410		SB28			-003			✓									✓				
	1420		SB29			-004			✓									✓				
	1435		SB31			-005			✓									✓				

Date	Time	Relinquished by:	Received by:	Date	Time
11/2/13	0855	[signature]	[signature]	11/2/13	0855
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

January 09, 2014

Beck Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Bundle Pad Hole OrderNo.: 1401101

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/3/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1401101**
Date Reported: **1/9/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Bundle Pad Hole
Project: Bundle Pad Hole
Collection Date: 12/31/2013 1:45:00 PM
Lab ID: 1401101-001
Matrix: AQUEOUS
Received Date: 1/3/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	ND	0.50		mg/L	5	1/6/2014 11:53:41 PM	R15918
EPA METHOD 7470: MERCURY						Analyst:	**JML**
Mercury	ND	0.0010		mg/L	5	1/7/2014 1:00:41 PM	11091
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	**ELS**
Arsenic	ND	0.020		mg/L	1	1/9/2014 10:39:30 AM	11099
Barium	4.0	0.10		mg/L	5	1/9/2014 10:41:00 AM	11099
Cadmium	ND	0.0020		mg/L	1	1/9/2014 10:39:30 AM	11099
Calcium	190	5.0		mg/L	5	1/9/2014 10:41:00 AM	11099
Chromium	0.0094	0.0060		mg/L	1	1/9/2014 10:39:30 AM	11099
Lead	0.060	0.0050		mg/L	1	1/9/2014 10:39:30 AM	11099
Magnesium	26	1.0		mg/L	1	1/9/2014 10:39:30 AM	11099
Potassium	4.0	1.0		mg/L	1	1/9/2014 10:39:30 AM	11099
Selenium	ND	0.050		mg/L	1	1/9/2014 10:39:30 AM	11099
Silver	ND	0.0050		mg/L	1	1/9/2014 10:39:30 AM	11099
Sodium	210	5.0		mg/L	5	1/9/2014 10:41:00 AM	11099
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	8700	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Toluene	17000	500		µg/L	500	1/8/2014 1:41:50 PM	R15972
Ethylbenzene	1600	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2,4-Trimethylbenzene	1000	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,3,5-Trimethylbenzene	250	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Naphthalene	ND	200		µg/L	100	1/8/2014 2:10:46 PM	R15972
1-Methylnaphthalene	ND	400		µg/L	100	1/8/2014 2:10:46 PM	R15972
2-Methylnaphthalene	ND	400		µg/L	100	1/8/2014 2:10:46 PM	R15972
Acetone	ND	1000		µg/L	100	1/8/2014 2:10:46 PM	R15972
Bromobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Bromodichloromethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Bromoform	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Bromomethane	ND	300		µg/L	100	1/8/2014 2:10:46 PM	R15972
2-Butanone	ND	1000		µg/L	100	1/8/2014 2:10:46 PM	R15972
Carbon disulfide	ND	1000		µg/L	100	1/8/2014 2:10:46 PM	R15972
Carbon Tetrachloride	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Chlorobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Chloroethane	ND	200		µg/L	100	1/8/2014 2:10:46 PM	R15972
Chloroform	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Bundle Pad Hole
Project: Bundle Pad Hole
Collection Date: 12/31/2013 1:45:00 PM
Lab ID: 1401101-001
Matrix: AQUEOUS
Received Date: 1/3/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Chloromethane	ND	300		µg/L	100	1/8/2014 2:10:46 PM	R15972
2-Chlorotoluene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
4-Chlorotoluene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
cis-1,2-DCE	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
cis-1,3-Dichloropropene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	1/8/2014 2:10:46 PM	R15972
Dibromochloromethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Dibromomethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2-Dichlorobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,3-Dichlorobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,4-Dichlorobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Dichlorodifluoromethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1-Dichloroethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1-Dichloroethene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2-Dichloropropane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,3-Dichloropropane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
2,2-Dichloropropane	ND	200		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1-Dichloropropene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Hexachlorobutadiene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
2-Hexanone	ND	1000		µg/L	100	1/8/2014 2:10:46 PM	R15972
Isopropylbenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
4-Isopropyltoluene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
4-Methyl-2-pentanone	ND	1000		µg/L	100	1/8/2014 2:10:46 PM	R15972
Methylene Chloride	ND	300		µg/L	100	1/8/2014 2:10:46 PM	R15972
n-Butylbenzene	ND	300		µg/L	100	1/8/2014 2:10:46 PM	R15972
n-Propylbenzene	140	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
sec-Butylbenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Styrene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
tert-Butylbenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	1/8/2014 2:10:46 PM	R15972
Tetrachloroethene (PCE)	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
trans-1,2-DCE	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
trans-1,3-Dichloropropene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2,3-Trichlorobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2,4-Trichlorobenzene	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1,1-Trichloroethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,1,2-Trichloroethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Trichloroethene (TCE)	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Bundle Pad Hole
Project: Bundle Pad Hole
Collection Date: 12/31/2013 1:45:00 PM
Lab ID: 1401101-001
Matrix: AQUEOUS
Received Date: 1/3/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Trichlorofluoromethane	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
1,2,3-Trichloropropane	ND	200		µg/L	100	1/8/2014 2:10:46 PM	R15972
Vinyl chloride	ND	100		µg/L	100	1/8/2014 2:10:46 PM	R15972
Xylenes, Total	7300	150		µg/L	100	1/8/2014 2:10:46 PM	R15972
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	100	1/8/2014 2:10:46 PM	R15972
Surr: 4-Bromofluorobenzene	107	70-130		%REC	100	1/8/2014 2:10:46 PM	R15972
Surr: Dibromofluoromethane	106	70-130		%REC	100	1/8/2014 2:10:46 PM	R15972
Surr: Toluene-d8	91.9	70-130		%REC	100	1/8/2014 2:10:46 PM	R15972
EPA METHOD 418.1: TPH						Analyst:	**JME**
Petroleum Hydrocarbons, TR	3000	100		mg/L	100	1/6/2014	11088

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

Qualifiers:

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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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **A6** SampType: **CCV_6** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458984** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.10	2.400	0	100	90	110			

Sample ID **A4** SampType: **CCV_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458992** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.96	0.10	1.000	0	96.4	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458994** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								

Sample ID **LCS-b** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458997** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	99.1	90	110			

Sample ID **A5** SampType: **CCV_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **459004** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.6	0.10	1.600	0	101	90	110			

Sample ID **A4** SampType: **CCV_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **459017** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.0	0.10	1.000	0	100	90	110			

Qualifiers:

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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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **A5** SampType: **CCV_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **459029** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.7	0.10	1.600	0	105	90	110			

Sample ID **A4** SampType: **CCV_4** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **459042** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.0	0.10	1.000	0	103	90	110			

Sample ID **A5** SampType: **CCV_5** TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC** Batch ID: **R15918** RunNo: **15918**
Prep Date: Analysis Date: **1/7/2014** SeqNo: **459054** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.7	0.10	1.600	0	103	90	110			

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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **MB-11088** SampType: **MBLK** TestCode: **EPA Method 418.1: TPH**
Client ID: **PBW** Batch ID: **11088** RunNo: **15905**
Prep Date: **1/6/2014** Analysis Date: **1/6/2014** SeqNo: **458585** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	1.0								

Sample ID **LCS-11088** SampType: **LCS** TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSW** Batch ID: **11088** RunNo: **15905**
Prep Date: **1/6/2014** Analysis Date: **1/6/2014** SeqNo: **458586** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	4.3	1.0	5.000	0	86.0	80	120			

Sample ID **LCSD-11088** SampType: **LCSD** TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02** Batch ID: **11088** RunNo: **15905**
Prep Date: **1/6/2014** Analysis Date: **1/6/2014** SeqNo: **458587** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	4.4	1.0	5.000	0	87.2	80	120	1.39	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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R15914** RunNo: **15914**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458886** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		114	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **100ng lcs 3** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R15914** RunNo: **15914**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458888** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.5	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID **b8** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R15914** RunNo: **15914**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458925** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		114	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.0		10.00		90.1	70	130			

Sample ID **100ng lcs 4** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R15914** RunNo: **15914**
Prep Date: Analysis Date: **1/6/2014** SeqNo: **458927** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R15930** RunNo: **15930**
Prep Date: Analysis Date: **1/7/2014** SeqNo: **459221** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R15930** RunNo: **15930**
Prep Date: Analysis Date: **1/7/2014** SeqNo: **459221** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.3		10.00		93.3	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R15930** RunNo: **15930**
Prep Date: Analysis Date: **1/7/2014** SeqNo: **459223** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	9.4		10.00		93.6	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R15972** RunNo: **15972**
Prep Date: Analysis Date: **1/8/2014** SeqNo: **460191** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								

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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R15972**	RunNo: **15972**			
Prep Date:	Analysis Date: **1/8/2014**	SeqNo: **460191**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								

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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R15972** RunNo: **15972**
Prep Date: Analysis Date: **1/8/2014** SeqNo: **460191** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R15972** RunNo: **15972**
Prep Date: Analysis Date: **1/8/2014** SeqNo: **460193** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.7	70	130			
Toluene	17	1.0	20.00	0	86.8	82.2	124			
Chlorobenzene	17	1.0	20.00	0	82.9	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	116	83.5	155			
Trichloroethene (TCE)	17	1.0	20.00	0	86.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		120	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	8.9		10.00		88.9	70	130			

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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **MB-11091** SampType: **MBLK** TestCode: **EPA Method 7470: Mercury**
Client ID: **PBW** Batch ID: **11091** RunNo: **15929**
Prep Date: **1/6/2014** Analysis Date: **1/7/2014** SeqNo: **459623** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-11091** SampType: **LCS** TestCode: **EPA Method 7470: Mercury**
Client ID: **LCSW** Batch ID: **11091** RunNo: **15929**
Prep Date: **1/6/2014** Analysis Date: **1/7/2014** SeqNo: **459624** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	103	80	120			

Sample ID **1401101-001CMS** SampType: **MS** TestCode: **EPA Method 7470: Mercury**
Client ID: **Bundle Pad Hole** Batch ID: **11091** RunNo: **15929**
Prep Date: **1/6/2014** Analysis Date: **1/7/2014** SeqNo: **459629** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.0010	0.005000	0	102	75	125			

Sample ID **1401101-001CMSD** SampType: **MSD** TestCode: **EPA Method 7470: Mercury**
Client ID: **Bundle Pad Hole** Batch ID: **11091** RunNo: **15929**
Prep Date: **1/6/2014** Analysis Date: **1/7/2014** SeqNo: **459630** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.0010	0.005000	0	101	75	125	0.769	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#: **1401101**
09-Jan-14

Client: Western Refining Southwest, Gallup
Project: Bundle Pad Hole

Sample ID **MB-11099** SampType: **MBLK** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **PBW** Batch ID: **11099** RunNo: **15981**
Prep Date: **1/7/2014** Analysis Date: **1/9/2014** SeqNo: **460419** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Selenium	ND	0.050								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID **LCS-11099** SampType: **LCS** TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **LCSW** Batch ID: **11099** RunNo: **15981**
Prep Date: **1/7/2014** Analysis Date: **1/9/2014** SeqNo: **460420** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.50	0.020	0.5000	0	99.0	80	120			
Barium	0.49	0.020	0.5000	0	97.1	80	120			
Cadmium	0.49	0.0020	0.5000	0	97.1	80	120			
Calcium	49	1.0	50.00	0	97.2	80	120			
Chromium	0.49	0.0060	0.5000	0	97.0	80	120			
Lead	0.48	0.0050	0.5000	0	95.8	80	120			
Magnesium	49	1.0	50.00	0	98.0	80	120			
Potassium	47	1.0	50.00	0	94.4	80	120			
Selenium	0.46	0.050	0.5000	0	91.9	80	120			
Silver	0.10	0.0050	0.1000	0	101	80	120			
Sodium	49	1.0	50.00	0	97.1	80	120			

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

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: 1401101 RcptNo: 1

Received by/date: AT 01/03/14

Logged By: **Lindsay Mangin** 1/3/2014 4:15:00 PM

Completed By: **Lindsay Mangin** 1/6/2014 8:46:10 AM

Reviewed By: 01/06/14

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° 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 ☐ 01/06/14
   See Remarks
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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

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

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: Added 2 mL HNO_3 to 001C for acceptable pH. Added 3 mL HCl to 001D for acceptable pH. 01/06

18. **Cooler Information**

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

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 ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush _____

Project Name:

Bundle Pad Hole

Project #:

Bundle Pad Hole

Project Manager:

Beck Larsen

Sampler: CTI

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1401101	BTEX + MTBE + TMB's (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 12 Total Metals	Anions (F)	8081 Pesticides / 8082 PCB's	8260B (VOA) TOTAL	8270 (Semi-VOA) TCLP	RCI	TCLP Metals RCRA 8	Cations	TPH Sulfur	Air Bubbles (Y or N)
12/31/2013	13:45	water	Bundle Pad Hole	3-250ml	None	-001				X			X	X						X		
12/31/2013	13:45	water	Bundle Pad Hole	3-40ml	HCL	-001										X						

Date	Time	Relinquished by:	Received by:	Date	Time
01-03-14	12:00			1-3-14	12:30
01/03/14	16:15			01/03/14	1615

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

April 28, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404655

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/15/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1404655**
Date Reported: **4/28/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 9:50:00 AM
Lab ID: 1404655-001
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	3.6	1.0		mg/L	1	4/15/2014 8:32:33 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 8:32:33 PM	12688
Surr: DNOP	118	62.7-145		%REC	1	4/15/2014 8:32:33 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	5.7	1.0		mg/L	20	4/21/2014 7:05:38 PM	R18124
Surr: BFB	91.8	80.4-118		%REC	20	4/21/2014 7:05:38 PM	R18124
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Acenaphthylene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Aniline	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Anthracene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Azobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Benz(a)anthracene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Benzo(a)pyrene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Benzo(b)fluoranthene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Benzo(k)fluoranthene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Benzoic acid	ND	20		µg/L	1	4/21/2014 1:41:31 PM	12756
Benzyl alcohol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Butyl benzyl phthalate	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Carbazole	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4-Chloroaniline	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2-Chloronaphthalene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2-Chlorophenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Chrysene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Di-n-butyl phthalate	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Di-n-octyl phthalate	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Dibenzofuran	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
1,2-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
1,3-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 9:50:00 AM
Lab ID: 1404655-001
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Diethyl phthalate	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Dimethyl phthalate	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2,4-Dichlorophenol	ND	20		µg/L	1	4/21/2014 1:41:31 PM	12756
2,4-Dimethylphenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/21/2014 1:41:31 PM	12756
2,4-Dinitrophenol	ND	20		µg/L	1	4/21/2014 1:41:31 PM	12756
2,4-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2,6-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Fluoranthene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Fluorene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Hexachlorobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Hexachlorobutadiene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Hexachloroethane	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Isophorone	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
1-Methylnaphthalene	46	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2-Methylnaphthalene	10	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2-Methylphenol	ND	20		µg/L	1	4/21/2014 1:41:31 PM	12756
3+4-Methylphenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
N-Nitrosodimethylamine	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Naphthalene	31	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2-Nitroaniline	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
3-Nitroaniline	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4-Nitroaniline	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Nitrobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2-Nitrophenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
4-Nitrophenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Pentachlorophenol	ND	20		µg/L	1	4/21/2014 1:41:31 PM	12756
Phenanthrene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Phenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Pyrene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Pyridine	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 9:50:00 AM
Lab ID: 1404655-001
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/21/2014 1:41:31 PM	12756
Surr: 2-Fluorophenol	59.4	12.1-85.8		%REC	1	4/21/2014 1:41:31 PM	12756
Surr: Phenol-d5	43.4	17.7-65.8		%REC	1	4/21/2014 1:41:31 PM	12756
Surr: 2,4,6-Tribromophenol	92.4	26-138		%REC	1	4/21/2014 1:41:31 PM	12756
Surr: Nitrobenzene-d5	80.0	47.5-119		%REC	1	4/21/2014 1:41:31 PM	12756
Surr: 2-Fluorobiphenyl	82.1	48.1-106		%REC	1	4/21/2014 1:41:31 PM	12756
Surr: 4-Terphenyl-d14	93.1	44-113		%REC	1	4/21/2014 1:41:31 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	1100	50		µg/L	50	4/18/2014 5:59:05 AM	R18067
Toluene	38	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Ethylbenzene	140	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Methyl tert-butyl ether (MTBE)	1200	50		µg/L	50	4/18/2014 5:59:05 AM	R18067
1,2,4-Trimethylbenzene	74	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Naphthalene	44	10		µg/L	5	4/19/2014 12:48:05 AM	R18092
1-Methylnaphthalene	62	20		µg/L	5	4/19/2014 12:48:05 AM	R18092
2-Methylnaphthalene	ND	20		µg/L	5	4/19/2014 12:48:05 AM	R18092
Acetone	ND	50		µg/L	5	4/19/2014 12:48:05 AM	R18092
Bromobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Bromodichloromethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Bromoform	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Bromomethane	ND	15		µg/L	5	4/19/2014 12:48:05 AM	R18092
2-Butanone	ND	50		µg/L	5	4/19/2014 12:48:05 AM	R18092
Carbon disulfide	ND	50		µg/L	5	4/19/2014 12:48:05 AM	R18092
Carbon Tetrachloride	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Chlorobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Chloroethane	ND	10		µg/L	5	4/19/2014 12:48:05 AM	R18092
Chloroform	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Chloromethane	ND	15		µg/L	5	4/19/2014 12:48:05 AM	R18092
2-Chlorotoluene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
4-Chlorotoluene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
cis-1,2-DCE	12	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	4/19/2014 12:48:05 AM	R18092
Dibromochloromethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Dibromomethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2-Dichlorobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 9:50:00 AM
Lab ID: 1404655-001
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,4-Dichlorobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Dichlorodifluoromethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1-Dichloroethane	24	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1-Dichloroethene	46	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2-Dichloropropane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,3-Dichloropropane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
2,2-Dichloropropane	ND	10		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1-Dichloropropene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Hexachlorobutadiene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
2-Hexanone	ND	50		µg/L	5	4/19/2014 12:48:05 AM	R18092
Isopropylbenzene	13	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
4-Isopropyltoluene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
4-Methyl-2-pentanone	ND	50		µg/L	5	4/19/2014 12:48:05 AM	R18092
Methylene Chloride	ND	15		µg/L	5	4/19/2014 12:48:05 AM	R18092
n-Butylbenzene	ND	15		µg/L	5	4/19/2014 12:48:05 AM	R18092
n-Propylbenzene	26	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
sec-Butylbenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Styrene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
tert-Butylbenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	4/19/2014 12:48:05 AM	R18092
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
trans-1,2-DCE	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1,1-Trichloroethane	72	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,1,2-Trichloroethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Trichloroethene (TCE)	8.9	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Trichlorofluoromethane	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
1,2,3-Trichloropropane	ND	10		µg/L	5	4/19/2014 12:48:05 AM	R18092
Vinyl chloride	ND	5.0		µg/L	5	4/19/2014 12:48:05 AM	R18092
Xylenes, Total	75	7.5		µg/L	5	4/19/2014 12:48:05 AM	R18092
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	5	4/19/2014 12:48:05 AM	R18092
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	5	4/19/2014 12:48:05 AM	R18092
Surr: Dibromofluoromethane	98.3	70-130		%REC	5	4/19/2014 12:48:05 AM	R18092
Surr: Toluene-d8	91.3	70-130		%REC	5	4/19/2014 12:48:05 AM	R18092

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:25:00 AM
Lab ID: 1404655-002
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	4.4	1.0		mg/L	1	4/15/2014 9:02:52 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 9:02:52 PM	12688
Surr: DNOP	119	62.7-145		%REC	1	4/15/2014 9:02:52 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2.2	0.25		mg/L	5	4/21/2014 7:34:16 PM	R18124
Surr: BFB	98.8	80.4-118		%REC	5	4/21/2014 7:34:16 PM	R18124
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Acenaphthylene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Aniline	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Anthracene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Azobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Benz(a)anthracene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Benzo(a)pyrene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Benzo(b)fluoranthene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Benzo(k)fluoranthene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Benzoic acid	ND	20		µg/L	1	4/21/2014 2:11:47 PM	12756
Benzyl alcohol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Butyl benzyl phthalate	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Carbazole	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4-Chloroaniline	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2-Chloronaphthalene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2-Chlorophenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Chrysene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Di-n-butyl phthalate	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Di-n-octyl phthalate	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Dibenzofuran	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
1,2-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
1,3-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:25:00 AM
Lab ID: 1404655-002
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Diethyl phthalate	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Dimethyl phthalate	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2,4-Dichlorophenol	ND	20		µg/L	1	4/21/2014 2:11:47 PM	12756
2,4-Dimethylphenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/21/2014 2:11:47 PM	12756
2,4-Dinitrophenol	ND	20		µg/L	1	4/21/2014 2:11:47 PM	12756
2,4-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2,6-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Fluoranthene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Fluorene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Hexachlorobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Hexachlorobutadiene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Hexachloroethane	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Isophorone	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
1-Methylnaphthalene	110	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2-Methylnaphthalene	35	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2-Methylphenol	ND	20		µg/L	1	4/21/2014 2:11:47 PM	12756
3+4-Methylphenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
N-Nitrosodimethylamine	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Naphthalene	61	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2-Nitroaniline	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
3-Nitroaniline	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4-Nitroaniline	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Nitrobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2-Nitrophenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
4-Nitrophenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Pentachlorophenol	ND	20		µg/L	1	4/21/2014 2:11:47 PM	12756
Phenanthrene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Phenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Pyrene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Pyridine	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:25:00 AM
Lab ID: 1404655-002
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/21/2014 2:11:47 PM	12756
Surr: 2-Fluorophenol	68.9	12.1-85.8		%REC	1	4/21/2014 2:11:47 PM	12756
Surr: Phenol-d5	47.5	17.7-65.8		%REC	1	4/21/2014 2:11:47 PM	12756
Surr: 2,4,6-Tribromophenol	98.9	26-138		%REC	1	4/21/2014 2:11:47 PM	12756
Surr: Nitrobenzene-d5	89.6	47.5-119		%REC	1	4/21/2014 2:11:47 PM	12756
Surr: 2-Fluorobiphenyl	98.4	48.1-106		%REC	1	4/21/2014 2:11:47 PM	12756
Surr: 4-Terphenyl-d14	88.2	44-113		%REC	1	4/21/2014 2:11:47 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	290	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Toluene	15	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Ethylbenzene	58	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Methyl tert-butyl ether (MTBE)	150	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2,4-Trimethylbenzene	91	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,3,5-Trimethylbenzene	24	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Naphthalene	77	10		µg/L	5	4/19/2014 1:45:50 AM	R18092
1-Methylnaphthalene	130	20		µg/L	5	4/19/2014 1:45:50 AM	R18092
2-Methylnaphthalene	43	20		µg/L	5	4/19/2014 1:45:50 AM	R18092
Acetone	ND	50		µg/L	5	4/19/2014 1:45:50 AM	R18092
Bromobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Bromodichloromethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Bromoform	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Bromomethane	ND	15		µg/L	5	4/19/2014 1:45:50 AM	R18092
2-Butanone	ND	50		µg/L	5	4/19/2014 1:45:50 AM	R18092
Carbon disulfide	ND	50		µg/L	5	4/19/2014 1:45:50 AM	R18092
Carbon Tetrachloride	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Chlorobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Chloroethane	ND	10		µg/L	5	4/19/2014 1:45:50 AM	R18092
Chloroform	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Chloromethane	ND	15		µg/L	5	4/19/2014 1:45:50 AM	R18092
2-Chlorotoluene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
4-Chlorotoluene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
cis-1,2-DCE	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	4/19/2014 1:45:50 AM	R18092
Dibromochloromethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Dibromomethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2-Dichlorobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:25:00 AM
Lab ID: 1404655-002
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,4-Dichlorobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Dichlorodifluoromethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1-Dichloroethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1-Dichloroethene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2-Dichloropropane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,3-Dichloropropane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
2,2-Dichloropropane	ND	10		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1-Dichloropropene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Hexachlorobutadiene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
2-Hexanone	ND	50		µg/L	5	4/19/2014 1:45:50 AM	R18092
Isopropylbenzene	5.2	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
4-Isopropyltoluene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
4-Methyl-2-pentanone	ND	50		µg/L	5	4/19/2014 1:45:50 AM	R18092
Methylene Chloride	ND	15		µg/L	5	4/19/2014 1:45:50 AM	R18092
n-Butylbenzene	ND	15		µg/L	5	4/19/2014 1:45:50 AM	R18092
n-Propylbenzene	7.6	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
sec-Butylbenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Styrene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
tert-Butylbenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	4/19/2014 1:45:50 AM	R18092
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
trans-1,2-DCE	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1,1-Trichloroethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,1,2-Trichloroethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Trichloroethene (TCE)	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Trichlorofluoromethane	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
1,2,3-Trichloropropane	ND	10		µg/L	5	4/19/2014 1:45:50 AM	R18092
Vinyl chloride	ND	5.0		µg/L	5	4/19/2014 1:45:50 AM	R18092
Xylenes, Total	44	7.5		µg/L	5	4/19/2014 1:45:50 AM	R18092
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	5	4/19/2014 1:45:50 AM	R18092
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	5	4/19/2014 1:45:50 AM	R18092
Surr: Dibromofluoromethane	106	70-130		%REC	5	4/19/2014 1:45:50 AM	R18092
Surr: Toluene-d8	92.1	70-130		%REC	5	4/19/2014 1:45:50 AM	R18092

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB04
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:50:00 AM
Lab ID: 1404655-003
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 9:33:12 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 9:33:12 PM	12688
Surr: DNOP	109	62.7-145		%REC	1	4/15/2014 9:33:12 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/21/2014 8:02:52 PM	R18124
Surr: BFB	85.7	80.4-118		%REC	1	4/21/2014 8:02:52 PM	R18124
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Acenaphthylene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Aniline	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Anthracene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Azobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Benz(a)anthracene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Benzo(a)pyrene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Benzo(b)fluoranthene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Benzo(k)fluoranthene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Benzoic acid	ND	20		µg/L	1	4/21/2014 2:41:59 PM	12756
Benzyl alcohol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Butyl benzyl phthalate	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Carbazole	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4-Chloroaniline	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2-Chloronaphthalene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2-Chlorophenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Chrysene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Di-n-butyl phthalate	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Di-n-octyl phthalate	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Dibenzofuran	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
1,2-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
1,3-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB04
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:50:00 AM
Lab ID: 1404655-003
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Diethyl phthalate	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Dimethyl phthalate	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2,4-Dichlorophenol	ND	20		µg/L	1	4/21/2014 2:41:59 PM	12756
2,4-Dimethylphenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/21/2014 2:41:59 PM	12756
2,4-Dinitrophenol	ND	20		µg/L	1	4/21/2014 2:41:59 PM	12756
2,4-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2,6-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Fluoranthene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Fluorene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Hexachlorobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Hexachlorobutadiene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Hexachloroethane	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Isophorone	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
1-Methylnaphthalene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2-Methylnaphthalene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2-Methylphenol	ND	20		µg/L	1	4/21/2014 2:41:59 PM	12756
3+4-Methylphenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
N-Nitrosodimethylamine	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Naphthalene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2-Nitroaniline	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
3-Nitroaniline	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4-Nitroaniline	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Nitrobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2-Nitrophenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
4-Nitrophenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Pentachlorophenol	ND	20		µg/L	1	4/21/2014 2:41:59 PM	12756
Phenanthrene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Phenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Pyrene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Pyridine	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB04
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:50:00 AM
Lab ID: 1404655-003
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/21/2014 2:41:59 PM	12756
Surr: 2-Fluorophenol	42.5	12.1-85.8		%REC	1	4/21/2014 2:41:59 PM	12756
Surr: Phenol-d5	34.6	17.7-65.8		%REC	1	4/21/2014 2:41:59 PM	12756
Surr: 2,4,6-Tribromophenol	66.2	26-138		%REC	1	4/21/2014 2:41:59 PM	12756
Surr: Nitrobenzene-d5	63.6	47.5-119		%REC	1	4/21/2014 2:41:59 PM	12756
Surr: 2-Fluorobiphenyl	65.9	48.1-106		%REC	1	4/21/2014 2:41:59 PM	12756
Surr: 4-Terphenyl-d14	77.1	44-113		%REC	1	4/21/2014 2:41:59 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Toluene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Ethylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Naphthalene	ND	2.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1-Methylnaphthalene	ND	4.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
2-Methylnaphthalene	ND	4.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Acetone	ND	10		µg/L	1	4/18/2014 6:56:40 AM	R18067
Bromobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Bromodichloromethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Bromoform	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Bromomethane	ND	3.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
2-Butanone	ND	10		µg/L	1	4/18/2014 6:56:40 AM	R18067
Carbon disulfide	ND	10		µg/L	1	4/18/2014 6:56:40 AM	R18067
Carbon Tetrachloride	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Chlorobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Chloroethane	ND	2.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Chloroform	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Chloromethane	ND	3.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
2-Chlorotoluene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
4-Chlorotoluene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
cis-1,2-DCE	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Dibromochloromethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Dibromomethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB04
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 10:50:00 AM
Lab ID: 1404655-003
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1-Dichloroethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1-Dichloroethene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2-Dichloropropane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,3-Dichloropropane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
2,2-Dichloropropane	ND	2.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1-Dichloropropene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Hexachlorobutadiene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
2-Hexanone	ND	10		µg/L	1	4/18/2014 6:56:40 AM	R18067
Isopropylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
4-Isopropyltoluene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
4-Methyl-2-pentanone	ND	10		µg/L	1	4/18/2014 6:56:40 AM	R18067
Methylene Chloride	ND	3.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
n-Butylbenzene	ND	3.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
n-Propylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
sec-Butylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Styrene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
tert-Butylbenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
trans-1,2-DCE	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Trichlorofluoromethane	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Vinyl chloride	ND	1.0		µg/L	1	4/18/2014 6:56:40 AM	R18067
Xylenes, Total	ND	1.5		µg/L	1	4/18/2014 6:56:40 AM	R18067
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/18/2014 6:56:40 AM	R18067
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	4/18/2014 6:56:40 AM	R18067
Surr: Dibromofluoromethane	112	70-130		%REC	1	4/18/2014 6:56:40 AM	R18067
Surr: Toluene-d8	93.8	70-130		%REC	1	4/18/2014 6:56:40 AM	R18067

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB05
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 11:00:00 AM
Lab ID: 1404655-004
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 10:03:43 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 10:03:43 PM	12688
Surr: DNOP	115	62.7-145		%REC	1	4/15/2014 10:03:43 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/21/2014 10:25:32 PM	R18124
Surr: BFB	86.5	80.4-118		%REC	1	4/21/2014 10:25:32 PM	R18124
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Acenaphthylene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Aniline	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Anthracene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Azobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Benz(a)anthracene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Benzo(a)pyrene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Benzo(b)fluoranthene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Benzo(k)fluoranthene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Benzoic acid	ND	20		µg/L	1	4/21/2014 3:12:01 PM	12756
Benzyl alcohol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Butyl benzyl phthalate	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Carbazole	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4-Chloroaniline	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2-Chloronaphthalene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2-Chlorophenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Chrysene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Di-n-butyl phthalate	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Di-n-octyl phthalate	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Dibenzofuran	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
1,2-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
1,3-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB05
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 11:00:00 AM
Lab ID: 1404655-004
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Diethyl phthalate	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Dimethyl phthalate	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2,4-Dichlorophenol	ND	20		µg/L	1	4/21/2014 3:12:01 PM	12756
2,4-Dimethylphenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/21/2014 3:12:01 PM	12756
2,4-Dinitrophenol	ND	20		µg/L	1	4/21/2014 3:12:01 PM	12756
2,4-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2,6-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Fluoranthene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Fluorene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Hexachlorobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Hexachlorobutadiene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Hexachloroethane	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Isophorone	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
1-Methylnaphthalene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2-Methylnaphthalene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2-Methylphenol	ND	20		µg/L	1	4/21/2014 3:12:01 PM	12756
3+4-Methylphenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
N-Nitrosodimethylamine	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Naphthalene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2-Nitroaniline	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
3-Nitroaniline	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4-Nitroaniline	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Nitrobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2-Nitrophenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
4-Nitrophenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Pentachlorophenol	ND	20		µg/L	1	4/21/2014 3:12:01 PM	12756
Phenanthrene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Phenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Pyrene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Pyridine	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB05
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 11:00:00 AM
Lab ID: 1404655-004
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/21/2014 3:12:01 PM	12756
Surr: 2-Fluorophenol	27.2	12.1-85.8		%REC	1	4/21/2014 3:12:01 PM	12756
Surr: Phenol-d5	33.8	17.7-65.8		%REC	1	4/21/2014 3:12:01 PM	12756
Surr: 2,4,6-Tribromophenol	36.9	26-138		%REC	1	4/21/2014 3:12:01 PM	12756
Surr: Nitrobenzene-d5	75.2	47.5-119		%REC	1	4/21/2014 3:12:01 PM	12756
Surr: 2-Fluorobiphenyl	76.4	48.1-106		%REC	1	4/21/2014 3:12:01 PM	12756
Surr: 4-Terphenyl-d14	80.5	44-113		%REC	1	4/21/2014 3:12:01 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Toluene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Ethylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Naphthalene	ND	2.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Acetone	ND	10		µg/L	1	4/19/2014 2:14:31 AM	R18092
Bromobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Bromoform	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Bromomethane	ND	3.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
2-Butanone	ND	10		µg/L	1	4/19/2014 2:14:31 AM	R18092
Carbon disulfide	ND	10		µg/L	1	4/19/2014 2:14:31 AM	R18092
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Chlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Chloroethane	ND	2.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Chloroform	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Chloromethane	ND	3.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Dibromomethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB05
Project: Hydrocarbon Seep
Collection Date: 4/14/2014 11:00:00 AM
Lab ID: 1404655-004
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
2-Hexanone	ND	10		µg/L	1	4/19/2014 2:14:31 AM	R18092
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2014 2:14:31 AM	R18092
Methylene Chloride	ND	3.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
n-Butylbenzene	ND	3.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Styrene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Vinyl chloride	ND	1.0		µg/L	1	4/19/2014 2:14:31 AM	R18092
Xylenes, Total	ND	1.5		µg/L	1	4/19/2014 2:14:31 AM	R18092
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/19/2014 2:14:31 AM	R18092
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	4/19/2014 2:14:31 AM	R18092
Surr: Dibromofluoromethane	108	70-130		%REC	1	4/19/2014 2:14:31 AM	R18092
Surr: Toluene-d8	90.3	70-130		%REC	1	4/19/2014 2:14:31 AM	R18092

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404655-005
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/21/2014 10:54:09 PM	R18124
Surr: BFB	86.3	80.4-118		%REC	1	4/21/2014 10:54:09 PM	R18124
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Toluene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Ethylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Naphthalene	ND	2.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Acetone	ND	10		µg/L	1	4/19/2014 2:43:09 AM	R18092
Bromobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Bromoform	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Bromomethane	ND	3.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
2-Butanone	ND	10		µg/L	1	4/19/2014 2:43:09 AM	R18092
Carbon disulfide	ND	10		µg/L	1	4/19/2014 2:43:09 AM	R18092
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Chlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Chloroethane	ND	2.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Chloroform	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Chloromethane	ND	3.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Dibromomethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404655-005
Matrix: AQUEOUS
Received Date: 4/15/2014 8:14:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
2-Hexanone	ND	10		µg/L	1	4/19/2014 2:43:09 AM	R18092
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2014 2:43:09 AM	R18092
Methylene Chloride	ND	3.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
n-Butylbenzene	ND	3.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Styrene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Vinyl chloride	ND	1.0		µg/L	1	4/19/2014 2:43:09 AM	R18092
Xylenes, Total	ND	1.5		µg/L	1	4/19/2014 2:43:09 AM	R18092
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	4/19/2014 2:43:09 AM	R18092
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	4/19/2014 2:43:09 AM	R18092
Surr: Dibromofluoromethane	108	70-130		%REC	1	4/19/2014 2:43:09 AM	R18092
Surr: Toluene-d8	93.9	70-130		%REC	1	4/19/2014 2:43:09 AM	R18092

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

Qualifiers:

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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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12688** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519168** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		103	62.7	145			

Sample ID **LCS-12688** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519169** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	96.4	78.6	146			
Surr: DNOP	0.48		0.5000		95.7	62.7	145			

Sample ID **LCSD-12688** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519170** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	114	78.6	146	17.0	26.5	
Surr: DNOP	0.51		0.5000		103	62.7	145	0	0	

Qualifiers:

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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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R18124**	RunNo:	**18124**
Prep Date:		Analysis Date:	**4/21/2014**	SeqNo:	**523149** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.8	80.4	118			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R18124**	RunNo:	**18124**
Prep Date:		Analysis Date:	**4/21/2014**	SeqNo:	**523150** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.53	0.050	0.5000	0	105	80	120			
Surr: BFB	19		20.00		95.1	80.4	118			

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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18067**	RunNo: **18067**			
Prep Date:	Analysis Date: **4/17/2014**	SeqNo: **521205**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18067** RunNo: **18067**
Prep Date: Analysis Date: **4/17/2014** SeqNo: **521205** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18067** RunNo: **18067**
Prep Date: Analysis Date: **4/17/2014** SeqNo: **521207** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.4	70	130			
Toluene	16	1.0	20.00	0	81.7	80	120			
Chlorobenzene	16	1.0	20.00	0	81.2	70	130			

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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R18067**	RunNo: **18067**
Prep Date:	Analysis Date: **4/17/2014**	SeqNo: **521207** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	90	143			
Trichloroethene (TCE)	19	1.0	20.00	0	93.2	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	9.0		10.00		90.1	70	130			

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R18092**	RunNo: **18092**
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522356** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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.
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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18092**	RunNo: **18092**			
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522356**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			

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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R18092**	RunNo: **18092**
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522356** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R18092**	RunNo: **18092**
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522358** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	17	1.0	20.00	0	85.7	80	120			
Chlorobenzene	17	1.0	20.00	0	83.1	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	102	90	143			
Trichloroethene (TCE)	18	1.0	20.00	0	90.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R18092**	RunNo: **18092**
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522386** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

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.
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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R18092**	RunNo: **18092**	
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522386**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

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.
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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18092**	RunNo: **18092**			
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522386**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.2		10.00		92.3	70	130			

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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12756**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12756**	RunNo: **18131**			
Prep Date: **4/17/2014**	Analysis Date: **4/21/2014**	SeqNo: **523312**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12756**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12756**	RunNo: **18131**			
Prep Date: **4/17/2014**	Analysis Date: **4/21/2014**	SeqNo: **523312**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		64.2	12.1	85.8			
Surr: Phenol-d5	100		200.0		51.8	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		96.3	26	138			
Surr: Nitrobenzene-d5	95		100.0		95.0	47.5	119			
Surr: 2-Fluorobiphenyl	92		100.0		92.1	48.1	106			
Surr: 4-Terphenyl-d14	88		100.0		88.1	44	113			

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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12756** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523313** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	76.6	50.3	109			
4-Chloro-3-methylphenol	170	10	200.0	0	84.9	51.2	113			
2-Chlorophenol	150	10	200.0	0	77.0	48.5	104			
1,4-Dichlorobenzene	70	10	100.0	0	70.2	39.5	106			
2,4-Dinitrotoluene	75	10	100.0	0	74.7	45.4	107			
N-Nitrosodi-n-propylamine	75	10	100.0	0	75.0	50.4	119			
4-Nitrophenol	90	10	200.0	0	44.8	15.5	62.2			
Pentachlorophenol	140	20	200.0	0	70.0	23.5	93.5			
Phenol	86	10	200.0	0	43.0	26.8	65.6			
Pyrene	85	10	100.0	0	85.0	54.4	108			
1,2,4-Trichlorobenzene	83	10	100.0	0	83.4	39.9	106			
Surr: 2-Fluorophenol	120		200.0		62.0	12.1	85.8			
Surr: Phenol-d5	96		200.0		48.0	17.7	65.8			
Surr: 2,4,6-Tribromophenol	200		200.0		97.6	26	138			
Surr: Nitrobenzene-d5	90		100.0		90.1	47.5	119			
Surr: 2-Fluorobiphenyl	92		100.0		92.3	48.1	106			
Surr: 4-Terphenyl-d14	84		100.0		84.5	44	113			

Sample ID **lcsd-12756** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	74	10	100.0	0	73.8	50.3	109	3.72	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	86.2	51.2	113	1.48	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	13.6	22.5	
1,4-Dichlorobenzene	63	10	100.0	0	63.3	39.5	106	10.3	24.6	
2,4-Dinitrotoluene	75	10	100.0	0	75.5	45.4	107	1.07	25.3	
N-Nitrosodi-n-propylamine	71	10	100.0	0	71.3	50.4	119	5.03	23.6	
4-Nitrophenol	98	10	200.0	0	48.9	15.5	62.2	8.73	34.7	
Pentachlorophenol	150	20	200.0	0	77.1	23.5	93.5	9.65	32.8	
Phenol	82	10	200.0	0	41.2	26.8	65.6	4.27	25.5	
Pyrene	97	10	100.0	0	97.1	54.4	108	13.4	31.4	
1,2,4-Trichlorobenzene	75	10	100.0	0	74.7	39.9	106	11.0	25.9	
Surr: 2-Fluorophenol	110		200.0		56.8	12.1	85.8	0	0	
Surr: Phenol-d5	80		200.0		40.2	17.7	65.8	0	0	
Surr: 2,4,6-Tribromophenol	180		200.0		90.5	26	138	0	0	
Surr: Nitrobenzene-d5	75		100.0		75.1	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	86		100.0		85.9	48.1	106	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.
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#: **1404655**
28-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**lcsd-12756**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**12756**	RunNo:	**18131**
Prep Date:	**4/17/2014**	Analysis Date:	**4/21/2014**	SeqNo:	**523314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	86		100.0		86.0	44	113	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1404655 RcptNo: 1

Received by/date: AT 04/15/14

Logged By: Anne Thorne 4/15/2014 8:14:00 AM

Completed By: Anne Thorne 4/15/2014

Reviewed By: MG 04/15/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	2.4	Good	Not Present			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Phone #: 505-722-0231
Email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☐ EDD (Type) ____

Turn-Around Time: ☑ Standard ☐ Rush ____
Project Name: HYDROCARBON SEEP
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE 361.438.1668
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.4

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404655	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
4-14-14	0950	GW	MKTF-09	40 ML VOA 1 L AMBER	5 HCL 2 NEAT	-001			✓							✓	✓				
	1025		MKTF-18			-002			✓							✓	✓				
	1050	W	FB04			-003			✓							✓	✓				
	1100	W	EB05			-004			✓							✓	✓				
-	-	W	TRIP BLANK	40 ML VOA	2 HCL	005										✓					

Date:	Time:	Relinquished by:	Received by:	Date Time
4-15-14	0814	[signature]	[signature]	04/15/14 0814
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

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.

Hall Environmental Analysis Laboratory
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Albuquerque, NM 87109
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Website: www.hallenvironmental.com

April 24, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404591

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 4/12/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1404591**
Date Reported: **4/24/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 10:00:00 AM
Lab ID: 1404591-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 4:58:25 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 4:58:25 PM	12688
Surr: DNOP	120	62.7-145		%REC	1	4/15/2014 4:58:25 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	0.21	0.050		mg/L	1	4/18/2014 3:21:36 AM	R18070
Surr: BFB	96.5	80.4-118		%REC	1	4/18/2014 3:21:36 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 8:17:31 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 10:00:00 AM
Lab ID: 1404591-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 8:17:31 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 8:17:31 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 8:17:31 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 8:17:31 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Naphthalene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 8:17:31 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 10:00:00 AM
Lab ID: 1404591-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 8:17:31 PM	12707
Surr: 2-Fluorophenol	63.3	12.1-85.8		%REC	1	4/16/2014 8:17:31 PM	12707
Surr: Phenol-d5	42.8	17.7-65.8		%REC	1	4/16/2014 8:17:31 PM	12707
Surr: 2,4,6-Tribromophenol	85.7	26-138		%REC	1	4/16/2014 8:17:31 PM	12707
Surr: Nitrobenzene-d5	90.1	47.5-119		%REC	1	4/16/2014 8:17:31 PM	12707
Surr: 2-Fluorobiphenyl	97.0	48.1-106		%REC	1	4/16/2014 8:17:31 PM	12707
Surr: 4-Terphenyl-d14	84.2	44-113		%REC	1	4/16/2014 8:17:31 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	28	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Toluene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Ethylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Methyl tert-butyl ether (MTBE)	360	10		µg/L	10	4/16/2014 11:35:18 PM	R18044
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Naphthalene	ND	2.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Acetone	ND	10		µg/L	1	4/16/2014 3:56:43 AM	R18006
Bromobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Bromoform	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Bromomethane	ND	3.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
2-Butanone	ND	10		µg/L	1	4/16/2014 3:56:43 AM	R18006
Carbon disulfide	ND	10		µg/L	1	4/16/2014 3:56:43 AM	R18006
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Chlorobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Chloroethane	ND	2.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Chloroform	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Chloromethane	ND	3.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Dibromomethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006

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

Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Project: Hydrocarbon Seep
Collection Date: 4/10/2014 10:00:00 AM
Lab ID: 1404591-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1-Dichloroethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
2-Hexanone	ND	10		µg/L	1	4/16/2014 3:56:43 AM	R18006
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2014 3:56:43 AM	R18006
Methylene Chloride	ND	3.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
n-Butylbenzene	ND	3.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Styrene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Vinyl chloride	ND	1.0		µg/L	1	4/16/2014 3:56:43 AM	R18006
Xylenes, Total	ND	1.5		µg/L	1	4/16/2014 3:56:43 AM	R18006
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	4/16/2014 3:56:43 AM	R18006
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	4/16/2014 3:56:43 AM	R18006
Surr: Dibromofluoromethane	107	70-130		%REC	1	4/16/2014 3:56:43 AM	R18006
Surr: Toluene-d8	97.6	70-130		%REC	1	4/16/2014 3:56:43 AM	R18006

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 12:10:00 PM
Lab ID: 1404591-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.6	1.0		mg/L	1	4/15/2014 5:29:13 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 5:29:13 PM	12688
Surr: DNOP	109	62.7-145		%REC	1	4/15/2014 5:29:13 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	10	0.50		mg/L	10	4/18/2014 3:50:13 AM	R18070
Surr: BFB	102	80.4-118		%REC	10	4/18/2014 3:50:13 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 8:46:46 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 12:10:00 PM
Lab ID: 1404591-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 8:46:46 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 8:46:46 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 8:46:46 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
1-Methylnaphthalene	45	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 8:46:46 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Naphthalene	13	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 8:46:46 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 12:10:00 PM
Lab ID: 1404591-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 8:46:46 PM	12707
Surr: 2-Fluorophenol	58.8	12.1-85.8		%REC	1	4/16/2014 8:46:46 PM	12707
Surr: Phenol-d5	39.6	17.7-65.8		%REC	1	4/16/2014 8:46:46 PM	12707
Surr: 2,4,6-Tribromophenol	90.8	26-138		%REC	1	4/16/2014 8:46:46 PM	12707
Surr: Nitrobenzene-d5	89.6	47.5-119		%REC	1	4/16/2014 8:46:46 PM	12707
Surr: 2-Fluorobiphenyl	92.4	48.1-106		%REC	1	4/16/2014 8:46:46 PM	12707
Surr: 4-Terphenyl-d14	85.8	44-113		%REC	1	4/16/2014 8:46:46 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	2300	100		µg/L	100	4/17/2014 12:04:04 AM	R18044
Toluene	21	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Ethylbenzene	280	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Methyl tert-butyl ether (MTBE)	3700	100		µg/L	100	4/17/2014 12:04:04 AM	R18044
1,2,4-Trimethylbenzene	89	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Naphthalene	ND	20		µg/L	10	4/17/2014 12:32:52 AM	R18044
1-Methylnaphthalene	48	40		µg/L	10	4/17/2014 12:32:52 AM	R18044
2-Methylnaphthalene	ND	40		µg/L	10	4/17/2014 12:32:52 AM	R18044
Acetone	ND	100		µg/L	10	4/17/2014 12:32:52 AM	R18044
Bromobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Bromodichloromethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Bromoform	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Bromomethane	ND	30		µg/L	10	4/17/2014 12:32:52 AM	R18044
2-Butanone	ND	100		µg/L	10	4/17/2014 12:32:52 AM	R18044
Carbon disulfide	ND	100		µg/L	10	4/17/2014 12:32:52 AM	R18044
Carbon Tetrachloride	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Chlorobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Chloroethane	ND	20		µg/L	10	4/17/2014 12:32:52 AM	R18044
Chloroform	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Chloromethane	ND	30		µg/L	10	4/17/2014 12:32:52 AM	R18044
2-Chlorotoluene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
4-Chlorotoluene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
cis-1,2-DCE	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/17/2014 12:32:52 AM	R18044
Dibromochloromethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Dibromomethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2-Dichlorobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 12:10:00 PM
Lab ID: 1404591-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,4-Dichlorobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Dichlorodifluoromethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1-Dichloroethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1-Dichloroethene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2-Dichloropropane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,3-Dichloropropane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
2,2-Dichloropropane	ND	20		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1-Dichloropropene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Hexachlorobutadiene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
2-Hexanone	ND	100		µg/L	10	4/17/2014 12:32:52 AM	R18044
Isopropylbenzene	15	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
4-Isopropyltoluene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
4-Methyl-2-pentanone	ND	100		µg/L	10	4/17/2014 12:32:52 AM	R18044
Methylene Chloride	ND	30		µg/L	10	4/17/2014 12:32:52 AM	R18044
n-Butylbenzene	ND	30		µg/L	10	4/17/2014 12:32:52 AM	R18044
n-Propylbenzene	33	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
sec-Butylbenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Styrene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
tert-Butylbenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/17/2014 12:32:52 AM	R18044
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
trans-1,2-DCE	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1,1-Trichloroethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,1,2-Trichloroethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Trichloroethene (TCE)	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Trichlorofluoromethane	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
1,2,3-Trichloropropane	ND	20		µg/L	10	4/17/2014 12:32:52 AM	R18044
Vinyl chloride	ND	10		µg/L	10	4/17/2014 12:32:52 AM	R18044
Xylenes, Total	32	15		µg/L	10	4/17/2014 12:32:52 AM	R18044
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	10	4/17/2014 12:32:52 AM	R18044
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	10	4/17/2014 12:32:52 AM	R18044
Surr: Dibromofluoromethane	107	70-130		%REC	10	4/17/2014 12:32:52 AM	R18044
Surr: Toluene-d8	91.6	70-130		%REC	10	4/17/2014 12:32:52 AM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 1:30:00 PM
Lab ID: 1404591-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	3.5	1.0		mg/L	1	4/15/2014 6:30:04 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 6:30:04 PM	12688
Surr: DNOP	105	62.7-145		%REC	1	4/15/2014 6:30:04 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	67	5.0		mg/L	100	4/18/2014 4:18:45 AM	R18070
Surr: BFB	93.2	80.4-118		%REC	100	4/18/2014 4:18:45 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Aniline	15	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 9:16:01 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 1:30:00 PM
Lab ID: 1404591-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 9:16:01 PM	12707
2,4-Dimethylphenol	200	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 9:16:01 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 9:16:01 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
1-Methylnaphthalene	35	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2-Methylnaphthalene	44	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2-Methylphenol	160	20		µg/L	1	4/16/2014 9:16:01 PM	12707
3+4-Methylphenol	91	10		µg/L	1	4/16/2014 9:16:01 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Naphthalene	130	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 9:16:01 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Phenol	90	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 1:30:00 PM
Lab ID: 1404591-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 9:16:01 PM	12707
Surr: 2-Fluorophenol	53.4	12.1-85.8		%REC	1	4/16/2014 9:16:01 PM	12707
Surr: Phenol-d5	33.1	17.7-65.8		%REC	1	4/16/2014 9:16:01 PM	12707
Surr: 2,4,6-Tribromophenol	91.2	26-138		%REC	1	4/16/2014 9:16:01 PM	12707
Surr: Nitrobenzene-d5	82.1	47.5-119		%REC	1	4/16/2014 9:16:01 PM	12707
Surr: 2-Fluorobiphenyl	80.8	48.1-106		%REC	1	4/16/2014 9:16:01 PM	12707
Surr: 4-Terphenyl-d14	84.3	44-113		%REC	1	4/16/2014 9:16:01 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	11000	200		µg/L	200	4/17/2014 1:30:34 AM	R18044
Toluene	7500	200		µg/L	200	4/17/2014 1:30:34 AM	R18044
Ethylbenzene	1100	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Methyl tert-butyl ether (MTBE)	270	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2,4-Trimethylbenzene	490	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,3,5-Trimethylbenzene	120	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Naphthalene	70	40		µg/L	20	4/17/2014 1:59:29 AM	R18044
1-Methylnaphthalene	ND	80		µg/L	20	4/17/2014 1:59:29 AM	R18044
2-Methylnaphthalene	ND	80		µg/L	20	4/17/2014 1:59:29 AM	R18044
Acetone	ND	200		µg/L	20	4/17/2014 1:59:29 AM	R18044
Bromobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Bromodichloromethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Bromoform	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Bromomethane	ND	60		µg/L	20	4/17/2014 1:59:29 AM	R18044
2-Butanone	ND	200		µg/L	20	4/17/2014 1:59:29 AM	R18044
Carbon disulfide	ND	200		µg/L	20	4/17/2014 1:59:29 AM	R18044
Carbon Tetrachloride	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Chlorobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Chloroethane	ND	40		µg/L	20	4/17/2014 1:59:29 AM	R18044
Chloroform	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Chloromethane	ND	60		µg/L	20	4/17/2014 1:59:29 AM	R18044
2-Chlorotoluene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
4-Chlorotoluene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
cis-1,2-DCE	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
cis-1,3-Dichloropropene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	4/17/2014 1:59:29 AM	R18044
Dibromochloromethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Dibromomethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2-Dichlorobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 1:30:00 PM
Lab ID: 1404591-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,4-Dichlorobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Dichlorodifluoromethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1-Dichloroethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1-Dichloroethene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2-Dichloropropane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,3-Dichloropropane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
2,2-Dichloropropane	ND	40		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1-Dichloropropene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Hexachlorobutadiene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
2-Hexanone	ND	200		µg/L	20	4/17/2014 1:59:29 AM	R18044
Isopropylbenzene	53	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
4-Isopropyltoluene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
4-Methyl-2-pentanone	ND	200		µg/L	20	4/17/2014 1:59:29 AM	R18044
Methylene Chloride	ND	60		µg/L	20	4/17/2014 1:59:29 AM	R18044
n-Butylbenzene	ND	60		µg/L	20	4/17/2014 1:59:29 AM	R18044
n-Propylbenzene	99	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
sec-Butylbenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Styrene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
tert-Butylbenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	4/17/2014 1:59:29 AM	R18044
Tetrachloroethene (PCE)	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
trans-1,2-DCE	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
trans-1,3-Dichloropropene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2,3-Trichlorobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2,4-Trichlorobenzene	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1,1-Trichloroethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,1,2-Trichloroethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Trichloroethene (TCE)	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Trichlorofluoromethane	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
1,2,3-Trichloropropane	ND	40		µg/L	20	4/17/2014 1:59:29 AM	R18044
Vinyl chloride	ND	20		µg/L	20	4/17/2014 1:59:29 AM	R18044
Xylenes, Total	3600	30		µg/L	20	4/17/2014 1:59:29 AM	R18044
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	20	4/17/2014 1:59:29 AM	R18044
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	20	4/17/2014 1:59:29 AM	R18044
Surr: Dibromofluoromethane	100	70-130		%REC	20	4/17/2014 1:59:29 AM	R18044
Surr: Toluene-d8	91.8	70-130		%REC	20	4/17/2014 1:59:29 AM	R18044

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:00:00 PM
Lab ID: 1404591-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	4.1	1.0		mg/L	1	4/15/2014 7:00:31 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 7:00:31 PM	12688
Surr: DNOP	112	62.7-145		%REC	1	4/15/2014 7:00:31 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	71	5.0		mg/L	100	4/18/2014 4:47:15 AM	R18070
Surr: BFB	94.3	80.4-118		%REC	100	4/18/2014 4:47:15 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Acenaphthylene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Aniline	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Anthracene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Azobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Benz(a)anthracene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Benzo(a)pyrene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Benzo(b)fluoranthene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Benzo(g,h,i)perylene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Benzo(k)fluoranthene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Benzoic acid	ND	25		µg/L	1	4/21/2014 5:12:16 PM	12756
Benzyl alcohol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Bis(2-chloroethoxy)methane	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Bis(2-chloroethyl)ether	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Bis(2-chloroisopropyl)ether	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Bis(2-ethylhexyl)phthalate	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4-Bromophenyl phenyl ether	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Butyl benzyl phthalate	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Carbazole	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4-Chloro-3-methylphenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4-Chloroaniline	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2-Chloronaphthalene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2-Chlorophenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4-Chlorophenyl phenyl ether	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Chrysene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Di-n-butyl phthalate	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Di-n-octyl phthalate	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Dibenz(a,h)anthracene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Dibenzofuran	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
1,2-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
1,3-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:00:00 PM
Lab ID: 1404591-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
3,3´-Dichlorobenzidine	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Diethyl phthalate	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Dimethyl phthalate	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2,4-Dichlorophenol	ND	25		µg/L	1	4/21/2014 5:12:16 PM	12756
2,4-Dimethylphenol	16	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4,6-Dinitro-2-methylphenol	ND	25		µg/L	1	4/21/2014 5:12:16 PM	12756
2,4-Dinitrophenol	ND	25		µg/L	1	4/21/2014 5:12:16 PM	12756
2,4-Dinitrotoluene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2,6-Dinitrotoluene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Fluoranthene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Fluorene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Hexachlorobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Hexachlorobutadiene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Hexachlorocyclopentadiene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Hexachloroethane	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Indeno(1,2,3-cd)pyrene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Isophorone	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
1-Methylnaphthalene	20	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2-Methylnaphthalene	21	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2-Methylphenol	43	25		µg/L	1	4/21/2014 5:12:16 PM	12756
3+4-Methylphenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
N-Nitrosodi-n-propylamine	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
N-Nitrosodimethylamine	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
N-Nitrosodiphenylamine	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Naphthalene	48	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2-Nitroaniline	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
3-Nitroaniline	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4-Nitroaniline	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Nitrobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2-Nitrophenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
4-Nitrophenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Pentachlorophenol	ND	25		µg/L	1	4/21/2014 5:12:16 PM	12756
Phenanthrene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Phenol	15	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Pyrene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Pyridine	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
1,2,4-Trichlorobenzene	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
2,4,5-Trichlorophenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:00:00 PM
Lab ID: 1404591-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	12		µg/L	1	4/21/2014 5:12:16 PM	12756
Surr: 2-Fluorophenol	48.1	12.1-85.8		%REC	1	4/21/2014 5:12:16 PM	12756
Surr: Phenol-d5	35.3	17.7-65.8		%REC	1	4/21/2014 5:12:16 PM	12756
Surr: 2,4,6-Tribromophenol	87.7	26-138		%REC	1	4/21/2014 5:12:16 PM	12756
Surr: Nitrobenzene-d5	70.8	47.5-119		%REC	1	4/21/2014 5:12:16 PM	12756
Surr: 2-Fluorobiphenyl	80.1	48.1-106		%REC	1	4/21/2014 5:12:16 PM	12756
Surr: 4-Terphenyl-d14	81.8	44-113		%REC	1	4/21/2014 5:12:16 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	16000	200		µg/L	200	4/17/2014 2:57:18 AM	R18044
Toluene	2400	200		µg/L	200	4/17/2014 2:57:18 AM	R18044
Ethylbenzene	1200	200		µg/L	200	4/17/2014 2:57:18 AM	R18044
Methyl tert-butyl ether (MTBE)	270	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2,4-Trimethylbenzene	460	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,3,5-Trimethylbenzene	110	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Naphthalene	72	20		µg/L	10	4/16/2014 5:23:05 AM	R18006
1-Methylnaphthalene	ND	40		µg/L	10	4/16/2014 5:23:05 AM	R18006
2-Methylnaphthalene	ND	40		µg/L	10	4/16/2014 5:23:05 AM	R18006
Acetone	ND	100		µg/L	10	4/16/2014 5:23:05 AM	R18006
Bromobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Bromodichloromethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Bromoform	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Bromomethane	ND	30		µg/L	10	4/16/2014 5:23:05 AM	R18006
2-Butanone	ND	100		µg/L	10	4/16/2014 5:23:05 AM	R18006
Carbon disulfide	ND	100		µg/L	10	4/16/2014 5:23:05 AM	R18006
Carbon Tetrachloride	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Chlorobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Chloroethane	ND	20		µg/L	10	4/16/2014 5:23:05 AM	R18006
Chloroform	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Chloromethane	ND	30		µg/L	10	4/16/2014 5:23:05 AM	R18006
2-Chlorotoluene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
4-Chlorotoluene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
cis-1,2-DCE	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/16/2014 5:23:05 AM	R18006
Dibromochloromethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Dibromomethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2-Dichlorobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:00:00 PM
Lab ID: 1404591-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,4-Dichlorobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Dichlorodifluoromethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1-Dichloroethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1-Dichloroethene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2-Dichloropropane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,3-Dichloropropane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
2,2-Dichloropropane	ND	20		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1-Dichloropropene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Hexachlorobutadiene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
2-Hexanone	ND	100		µg/L	10	4/16/2014 5:23:05 AM	R18006
Isopropylbenzene	53	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
4-Isopropyltoluene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
4-Methyl-2-pentanone	ND	100		µg/L	10	4/16/2014 5:23:05 AM	R18006
Methylene Chloride	ND	30		µg/L	10	4/16/2014 5:23:05 AM	R18006
n-Butylbenzene	ND	30		µg/L	10	4/16/2014 5:23:05 AM	R18006
n-Propylbenzene	94	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
sec-Butylbenzene	12	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Styrene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
tert-Butylbenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/16/2014 5:23:05 AM	R18006
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
trans-1,2-DCE	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1,1-Trichloroethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,1,2-Trichloroethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Trichloroethene (TCE)	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Trichlorofluoromethane	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
1,2,3-Trichloropropane	ND	20		µg/L	10	4/16/2014 5:23:05 AM	R18006
Vinyl chloride	ND	10		µg/L	10	4/16/2014 5:23:05 AM	R18006
Xylenes, Total	6100	300		µg/L	200	4/17/2014 2:57:18 AM	R18044
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	10	4/16/2014 5:23:05 AM	R18006
Surr: 4-Bromofluorobenzene	89.5	70-130		%REC	10	4/16/2014 5:23:05 AM	R18006
Surr: Dibromofluoromethane	97.7	70-130		%REC	10	4/16/2014 5:23:05 AM	R18006
Surr: Toluene-d8	95.5	70-130		%REC	10	4/16/2014 5:23:05 AM	R18006

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB02
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:25:00 PM
Lab ID: 1404591-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 7:31:20 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 7:31:20 PM	12688
Surr: DNOP	112	62.7-145		%REC	1	4/15/2014 7:31:20 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/18/2014 5:15:46 AM	R18070
Surr: BFB	88.4	80.4-118		%REC	1	4/18/2014 5:15:46 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Acenaphthylene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Aniline	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Anthracene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Azobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Benz(a)anthracene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Benzo(a)pyrene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Benzo(b)fluoranthene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Benzo(g,h,i)perylene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Benzo(k)fluoranthene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Benzoic acid	ND	28		µg/L	1	4/21/2014 5:42:10 PM	12756
Benzyl alcohol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Bis(2-chloroethoxy)methane	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Bis(2-chloroethyl)ether	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Bis(2-chloroisopropyl)ether	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Bis(2-ethylhexyl)phthalate	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4-Bromophenyl phenyl ether	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Butyl benzyl phthalate	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Carbazole	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4-Chloro-3-methylphenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4-Chloroaniline	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2-Chloronaphthalene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2-Chlorophenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4-Chlorophenyl phenyl ether	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Chrysene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Di-n-butyl phthalate	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Di-n-octyl phthalate	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Dibenz(a,h)anthracene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Dibenzofuran	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
1,2-Dichlorobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
1,3-Dichlorobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB02
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:25:00 PM
Lab ID: 1404591-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
3,3´-Dichlorobenzidine	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Diethyl phthalate	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Dimethyl phthalate	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2,4-Dichlorophenol	ND	28		µg/L	1	4/21/2014 5:42:10 PM	12756
2,4-Dimethylphenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4,6-Dinitro-2-methylphenol	ND	28		µg/L	1	4/21/2014 5:42:10 PM	12756
2,4-Dinitrophenol	ND	28		µg/L	1	4/21/2014 5:42:10 PM	12756
2,4-Dinitrotoluene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2,6-Dinitrotoluene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Fluoranthene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Fluorene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Hexachlorobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Hexachlorobutadiene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Hexachlorocyclopentadiene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Hexachloroethane	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Indeno(1,2,3-cd)pyrene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Isophorone	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
1-Methylnaphthalene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2-Methylnaphthalene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2-Methylphenol	ND	28		µg/L	1	4/21/2014 5:42:10 PM	12756
3+4-Methylphenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
N-Nitrosodi-n-propylamine	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
N-Nitrosodimethylamine	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
N-Nitrosodiphenylamine	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Naphthalene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2-Nitroaniline	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
3-Nitroaniline	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4-Nitroaniline	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Nitrobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2-Nitrophenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
4-Nitrophenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Pentachlorophenol	ND	28		µg/L	1	4/21/2014 5:42:10 PM	12756
Phenanthrene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Phenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Pyrene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Pyridine	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
1,2,4-Trichlorobenzene	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
2,4,5-Trichlorophenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB02
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:25:00 PM
Lab ID: 1404591-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	14		µg/L	1	4/21/2014 5:42:10 PM	12756
Surr: 2-Fluorophenol	67.0	12.1-85.8		%REC	1	4/21/2014 5:42:10 PM	12756
Surr: Phenol-d5	46.8	17.7-65.8		%REC	1	4/21/2014 5:42:10 PM	12756
Surr: 2,4,6-Tribromophenol	89.8	26-138		%REC	1	4/21/2014 5:42:10 PM	12756
Surr: Nitrobenzene-d5	97.5	47.5-119		%REC	1	4/21/2014 5:42:10 PM	12756
Surr: 2-Fluorobiphenyl	90.4	48.1-106		%REC	1	4/21/2014 5:42:10 PM	12756
Surr: 4-Terphenyl-d14	92.2	44-113		%REC	1	4/21/2014 5:42:10 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Toluene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Ethylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Naphthalene	ND	2.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1-Methylnaphthalene	ND	4.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
2-Methylnaphthalene	ND	4.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Acetone	ND	10		µg/L	1	4/17/2014 3:26:04 AM	R18044
Bromobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Bromodichloromethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Bromoform	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Bromomethane	ND	3.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
2-Butanone	ND	10		µg/L	1	4/17/2014 3:26:04 AM	R18044
Carbon disulfide	ND	10		µg/L	1	4/17/2014 3:26:04 AM	R18044
Carbon Tetrachloride	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Chlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Chloroethane	ND	2.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Chloroform	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Chloromethane	ND	3.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
2-Chlorotoluene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
4-Chlorotoluene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
cis-1,2-DCE	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Dibromochloromethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Dibromomethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB02
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:25:00 PM
Lab ID: 1404591-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1-Dichloroethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1-Dichloroethene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2-Dichloropropane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,3-Dichloropropane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
2,2-Dichloropropane	ND	2.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1-Dichloropropene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Hexachlorobutadiene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
2-Hexanone	ND	10		µg/L	1	4/17/2014 3:26:04 AM	R18044
Isopropylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
4-Isopropyltoluene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
4-Methyl-2-pentanone	ND	10		µg/L	1	4/17/2014 3:26:04 AM	R18044
Methylene Chloride	ND	3.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
n-Butylbenzene	ND	3.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
n-Propylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
sec-Butylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Styrene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
tert-Butylbenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
trans-1,2-DCE	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Trichlorofluoromethane	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Vinyl chloride	ND	1.0		µg/L	1	4/17/2014 3:26:04 AM	R18044
Xylenes, Total	ND	1.5		µg/L	1	4/17/2014 3:26:04 AM	R18044
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	4/17/2014 3:26:04 AM	R18044
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	4/17/2014 3:26:04 AM	R18044
Surr: Dibromofluoromethane	108	70-130		%REC	1	4/17/2014 3:26:04 AM	R18044
Surr: Toluene-d8	93.1	70-130		%REC	1	4/17/2014 3:26:04 AM	R18044

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:40:00 PM
Lab ID: 1404591-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 8:01:50 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 8:01:50 PM	12688
Surr: DNOP	113	62.7-145		%REC	1	4/15/2014 8:01:50 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/18/2014 5:44:19 AM	R18070
Surr: BFB	88.4	80.4-118		%REC	1	4/18/2014 5:44:19 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Acenaphthylene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Aniline	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Anthracene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Azobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Benz(a)anthracene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Benzo(a)pyrene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Benzo(b)fluoranthene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Benzo(k)fluoranthene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Benzoic acid	ND	20		µg/L	1	4/21/2014 1:11:33 PM	12756
Benzyl alcohol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Butyl benzyl phthalate	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Carbazole	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4-Chloroaniline	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2-Chloronaphthalene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2-Chlorophenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Chrysene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Di-n-butyl phthalate	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Di-n-octyl phthalate	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Dibenzofuran	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
1,2-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
1,3-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:40:00 PM
Lab ID: 1404591-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Diethyl phthalate	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Dimethyl phthalate	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2,4-Dichlorophenol	ND	20		µg/L	1	4/21/2014 1:11:33 PM	12756
2,4-Dimethylphenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/21/2014 1:11:33 PM	12756
2,4-Dinitrophenol	ND	20		µg/L	1	4/21/2014 1:11:33 PM	12756
2,4-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2,6-Dinitrotoluene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Fluoranthene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Fluorene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Hexachlorobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Hexachlorobutadiene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Hexachloroethane	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Isophorone	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
1-Methylnaphthalene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2-Methylnaphthalene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2-Methylphenol	ND	20		µg/L	1	4/21/2014 1:11:33 PM	12756
3+4-Methylphenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
N-Nitrosodimethylamine	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Naphthalene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2-Nitroaniline	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
3-Nitroaniline	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4-Nitroaniline	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Nitrobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2-Nitrophenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
4-Nitrophenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Pentachlorophenol	ND	20		µg/L	1	4/21/2014 1:11:33 PM	12756
Phenanthrene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Phenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Pyrene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Pyridine	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:40:00 PM
Lab ID: 1404591-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/21/2014 1:11:33 PM	12756
Surr: 2-Fluorophenol	30.8	12.1-85.8		%REC	1	4/21/2014 1:11:33 PM	12756
Surr: Phenol-d5	23.5	17.7-65.8		%REC	1	4/21/2014 1:11:33 PM	12756
Surr: 2,4,6-Tribromophenol	58.5	26-138		%REC	1	4/21/2014 1:11:33 PM	12756
Surr: Nitrobenzene-d5	44.9	47.5-119	S	%REC	1	4/21/2014 1:11:33 PM	12756
Surr: 2-Fluorobiphenyl	55.5	48.1-106		%REC	1	4/21/2014 1:11:33 PM	12756
Surr: 4-Terphenyl-d14	61.4	44-113		%REC	1	4/21/2014 1:11:33 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Toluene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Ethylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Naphthalene	ND	2.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1-Methylnaphthalene	ND	4.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
2-Methylnaphthalene	ND	4.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Acetone	ND	10		µg/L	1	4/17/2014 3:54:43 AM	R18044
Bromobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Bromodichloromethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Bromoform	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Bromomethane	ND	3.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
2-Butanone	ND	10		µg/L	1	4/17/2014 3:54:43 AM	R18044
Carbon disulfide	ND	10		µg/L	1	4/17/2014 3:54:43 AM	R18044
Carbon Tetrachloride	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Chlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Chloroethane	ND	2.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Chloroform	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Chloromethane	ND	3.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
2-Chlorotoluene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
4-Chlorotoluene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
cis-1,2-DCE	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Dibromochloromethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Dibromomethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/10/2014 4:40:00 PM
Lab ID: 1404591-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1-Dichloroethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1-Dichloroethene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2-Dichloropropane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,3-Dichloropropane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
2,2-Dichloropropane	ND	2.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1-Dichloropropene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Hexachlorobutadiene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
2-Hexanone	ND	10		µg/L	1	4/17/2014 3:54:43 AM	R18044
Isopropylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
4-Isopropyltoluene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
4-Methyl-2-pentanone	ND	10		µg/L	1	4/17/2014 3:54:43 AM	R18044
Methylene Chloride	ND	3.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
n-Butylbenzene	ND	3.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
n-Propylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
sec-Butylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Styrene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
tert-Butylbenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
trans-1,2-DCE	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Trichlorofluoromethane	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Vinyl chloride	ND	1.0		µg/L	1	4/17/2014 3:54:43 AM	R18044
Xylenes, Total	ND	1.5		µg/L	1	4/17/2014 3:54:43 AM	R18044
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%REC	1	4/17/2014 3:54:43 AM	R18044
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	4/17/2014 3:54:43 AM	R18044
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/17/2014 3:54:43 AM	R18044
Surr: Toluene-d8	93.0	70-130		%REC	1	4/17/2014 3:54:43 AM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404591-007
Matrix: TRIP BLANK
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Toluene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Ethylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Naphthalene	ND	2.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Acetone	ND	10		µg/L	1	4/16/2014 6:49:19 AM	R18006
Bromobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Bromoform	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Bromomethane	ND	3.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
2-Butanone	ND	10		µg/L	1	4/16/2014 6:49:19 AM	R18006
Carbon disulfide	ND	10		µg/L	1	4/16/2014 6:49:19 AM	R18006
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Chlorobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Chloroethane	ND	2.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Chloroform	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Chloromethane	ND	3.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Dibromomethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,1-Dichloroethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2014 6:49:19 AM	R18006

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup **Client Sample ID:** Trip Blank
Project: Hydrocarbon Seep **Collection Date:**
Lab ID: 1404591-007 **Matrix:** TRIP BLANK **Received Date:** 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
2-Hexanone	ND	10		µg/L	1	4/16/2014 6:49:19 AM	R18006
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2014 6:49:19 AM	R18006
Methylene Chloride	ND	3.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
n-Butylbenzene	ND	3.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Styrene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Vinyl chloride	ND	1.0		µg/L	1	4/16/2014 6:49:19 AM	R18006
Xylenes, Total	ND	1.5		µg/L	1	4/16/2014 6:49:19 AM	R18006
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	4/16/2014 6:49:19 AM	R18006
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	4/16/2014 6:49:19 AM	R18006
Surr: Dibromofluoromethane	107	70-130		%REC	1	4/16/2014 6:49:19 AM	R18006
Surr: Toluene-d8	90.4	70-130		%REC	1	4/16/2014 6:49:19 AM	R18006

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12688** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519168** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		103	62.7	145			

Sample ID **LCS-12688** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519169** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	96.4	78.6	146			
Surr: DNOP	0.48		0.5000		95.7	62.7	145			

Sample ID **LCSD-12688** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519170** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	114	78.6	146	17.0	26.5	
Surr: DNOP	0.51		0.5000		103	62.7	145	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.
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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**5ML-RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R18070**	RunNo:	**18070**
Prep Date:		Analysis Date:	**4/17/2014**	SeqNo:	**521323** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.4	80.4	118			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R18070**	RunNo:	**18070**
Prep Date:		Analysis Date:	**4/17/2014**	SeqNo:	**521324** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	103	80	120			
Surr: BFB	19		20.00		95.1	80.4	118			

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18006**	RunNo: **18006**			
Prep Date:	Analysis Date: **4/15/2014**	SeqNo: **519480**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18006** RunNo: **18006**
Prep Date: Analysis Date: **4/15/2014** SeqNo: **519480** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		96.2	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18006** RunNo: **18006**
Prep Date: Analysis Date: **4/15/2014** SeqNo: **519486** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.1	70	130			
Toluene	17	1.0	20.00	0	85.5	80	120			
Chlorobenzene	17	1.0	20.00	0	82.8	70	130			

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **LCSW**	Batch ID: **R18006**		RunNo: **18006**		
Prep Date:	Analysis Date: **4/15/2014**		SeqNo: **519486**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	97.2	90	143			
Trichloroethene (TCE)	18	1.0	20.00	0	90.6	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.0	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			

Sample ID **b2**	SampType: **MBLK**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **PBW**	Batch ID: **R18044**		RunNo: **18044**		
Prep Date:	Analysis Date: **4/16/2014**		SeqNo: **520592**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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.
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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R18044**	RunNo: **18044**	
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520592**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18044**	RunNo: **18044**			
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520592**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R18044**	RunNo: **18044**			
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520614**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	70	130			
Toluene	17	1.0	20.00	0	84.5	80	120			
Chlorobenzene	17	1.0	20.00	0	83.6	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.8	90	143			
Trichloroethene (TCE)	18	1.0	20.00	0	91.0	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		99.9	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		55.1	12.1	85.8			
Surr: Phenol-d5	84		200.0		42.2	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		93.5	26	138			
Surr: Nitrobenzene-d5	71		100.0		71.4	47.5	119			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	48.1	106			
Surr: 4-Terphenyl-d14	90		100.0		89.7	44	113			

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.5	50.3	109			
4-Chloro-3-methylphenol	150	10	200.0	0	74.8	51.2	113			
2-Chlorophenol	140	10	200.0	0	69.9	48.5	104			
1,4-Dichlorobenzene	69	10	100.0	0	68.8	39.5	106			
2,4-Dinitrotoluene	71	10	100.0	0	71.3	45.4	107			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.7	50.4	119			
4-Nitrophenol	160	10	200.0	0	80.4	15.5	62.2			S
Pentachlorophenol	150	20	200.0	0	74.9	23.5	93.5			
Phenol	150	10	200.0	0	73.6	26.8	65.6			S
Pyrene	79	10	100.0	0	79.4	54.4	108			
1,2,4-Trichlorobenzene	68	10	100.0	0	67.8	39.9	106			
Surr: 2-Fluorophenol	140		200.0		71.1	12.1	85.8			
Surr: Phenol-d5	140		200.0		71.9	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	170		200.0		85.2	26	138			
Surr: Nitrobenzene-d5	73		100.0		72.7	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	48.1	106			
Surr: 4-Terphenyl-d14	81		100.0		80.6	44	113			

Sample ID **lcsd-12707** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	66	10	100.0	0	66.3	50.3	109	7.61	27.2	
4-Chloro-3-methylphenol	140	10	200.0	0	70.3	51.2	113	6.31	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	4.01	22.5	
1,4-Dichlorobenzene	67	10	100.0	0	67.2	39.5	106	2.32	24.6	
2,4-Dinitrotoluene	59	10	100.0	0	59.2	45.4	107	18.5	25.3	
N-Nitrosodi-n-propylamine	66	10	100.0	0	66.4	50.4	119	7.62	23.6	
4-Nitrophenol	140	10	200.0	0	67.6	15.5	62.2	17.2	34.7	S
Pentachlorophenol	130	20	200.0	0	63.4	23.5	93.5	16.6	32.8	
Phenol	140	10	200.0	0	70.0	26.8	65.6	5.02	25.5	S
Pyrene	73	10	100.0	0	73.3	54.4	108	7.94	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	65.5	39.9	106	3.39	25.9	
Surr: 2-Fluorophenol	130		200.0		65.5	12.1	85.8	0	0	
Surr: Phenol-d5	130		200.0		67.0	17.7	65.8	0	0	S
Surr: 2,4,6-Tribromophenol	160		200.0		80.2	26	138	0	0	
Surr: Nitrobenzene-d5	65		100.0		64.7	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.9	48.1	106	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.
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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**lcsd-12707**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**LCSS02**	Batch ID:	**12707**	RunNo:	**18041**				
Prep Date:	**4/15/2014**	Analysis Date:	**4/16/2014**	SeqNo:	**520515**	Units:	**µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	75		100.0		75.1	44	113	0	0	

Sample ID	**mb-12756**	SampType:	**MBLK**	TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**PBW**	Batch ID:	**12756**	RunNo:	**18131**				
Prep Date:	**4/17/2014**	Analysis Date:	**4/21/2014**	SeqNo:	**523312**	Units:	**µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12756**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12756**	RunNo: **18131**			
Prep Date: **4/17/2014**	Analysis Date: **4/21/2014**	SeqNo: **523312**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12756** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523312** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	130		200.0		64.2	12.1	85.8			
Surr: Phenol-d5	100		200.0		51.8	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		96.3	26	138			
Surr: Nitrobenzene-d5	95		100.0		95.0	47.5	119			
Surr: 2-Fluorobiphenyl	92		100.0		92.1	48.1	106			
Surr: 4-Terphenyl-d14	88		100.0		88.1	44	113			

Sample ID **lcs-12756** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523313** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	76.6	50.3	109			
4-Chloro-3-methylphenol	170	10	200.0	0	84.9	51.2	113			
2-Chlorophenol	150	10	200.0	0	77.0	48.5	104			
1,4-Dichlorobenzene	70	10	100.0	0	70.2	39.5	106			
2,4-Dinitrotoluene	75	10	100.0	0	74.7	45.4	107			
N-Nitrosodi-n-propylamine	75	10	100.0	0	75.0	50.4	119			
4-Nitrophenol	90	10	200.0	0	44.8	15.5	62.2			
Pentachlorophenol	140	20	200.0	0	70.0	23.5	93.5			
Phenol	86	10	200.0	0	43.0	26.8	65.6			
Pyrene	85	10	100.0	0	85.0	54.4	108			
1,2,4-Trichlorobenzene	83	10	100.0	0	83.4	39.9	106			
Surr: 2-Fluorophenol	120		200.0		62.0	12.1	85.8			
Surr: Phenol-d5	96		200.0		48.0	17.7	65.8			
Surr: 2,4,6-Tribromophenol	200		200.0		97.6	26	138			
Surr: Nitrobenzene-d5	90		100.0		90.1	47.5	119			
Surr: 2-Fluorobiphenyl	92		100.0		92.3	48.1	106			
Surr: 4-Terphenyl-d14	84		100.0		84.5	44	113			

Sample ID **lcsd-12756** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	74	10	100.0	0	73.8	50.3	109	3.72	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	86.2	51.2	113	1.48	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	13.6	22.5	
1,4-Dichlorobenzene	63	10	100.0	0	63.3	39.5	106	10.3	24.6	
2,4-Dinitrotoluene	75	10	100.0	0	75.5	45.4	107	1.07	25.3	

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#: **1404591**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcsd-12756** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	71	10	100.0	0	71.3	50.4	119	5.03	23.6	
4-Nitrophenol	98	10	200.0	0	48.9	15.5	62.2	8.73	34.7	
Pentachlorophenol	150	20	200.0	0	77.1	23.5	93.5	9.65	32.8	
Phenol	82	10	200.0	0	41.2	26.8	65.6	4.27	25.5	
Pyrene	97	10	100.0	0	97.1	54.4	108	13.4	31.4	
1,2,4-Trichlorobenzene	75	10	100.0	0	74.7	39.9	106	11.0	25.9	
Surr: 2-Fluorophenol	110		200.0		56.8	12.1	85.8	0	0	
Surr: Phenol-d5	80		200.0		40.2	17.7	65.8	0	0	
Surr: 2,4,6-Tribromophenol	180		200.0		90.5	26	138	0	0	
Surr: Nitrobenzene-d5	75		100.0		75.1	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	86		100.0		85.9	48.1	106	0	0	
Surr: 4-Terphenyl-d14	86		100.0		86.0	44	113	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
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S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1404591** RcptNo: **1**

Received by/date: AF 04/12/14

Logged By: **Lindsay Mangin** **4/12/2014 8:26:00 AM**

Completed By: **Lindsay Mangin** **4/14/2014 7:53:28 AM**

Reviewed By: CS 04/14/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	2.1	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP NM 87301
Phone #: 505-722-0231
email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____
Project Name: HYDROCARBON SEEP
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE 361.438.1668
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.3°C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404591	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
4-10-14	1000	GW	MKTF-33	40 ML VOA 1 LAMBER	5-HCL 2-NEAT	-001			✓							✓	✓					
	1210		MKTF-22			-002			✓							✓	✓					
	1330		MKTF-16			-003			✓							✓	✓					
	1600		MKTF-15			-004			✓							✓	✓					
	1625	W	FB02			-005			✓							✓	✓					
	1640	W	EB03			-006			✓							✓	✓					
-	-	W	TRIP BLANK	40 ML VOA	2-HCL	-007										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/12/14	0826	[signature]	[signature]	4/12/14	0826
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 24, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404590

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 4/12/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 10:50:00 AM
Lab ID: 1404590-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.7	1.0		mg/L	1	4/15/2014 11:59:19 AM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 11:59:19 AM	12688
Surr: DNOP	115	62.7-145		%REC	1	4/15/2014 11:59:19 AM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	53	5.0		mg/L	100	4/17/2014 10:36:05 PM	R18070
Surr: BFB	91.0	80.4-118		%REC	100	4/17/2014 10:36:05 PM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Aniline	23	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 4:22:00 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 10:50:00 AM
Lab ID: 1404590-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 4:22:00 PM	12707
2,4-Dimethylphenol	78	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 4:22:00 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 4:22:00 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
1-Methylnaphthalene	12	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2-Methylphenol	160	20		µg/L	1	4/16/2014 4:22:00 PM	12707
3+4-Methylphenol	110	10		µg/L	1	4/16/2014 4:22:00 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Naphthalene	38	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 4:22:00 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Phenol	21	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707

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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 10:50:00 AM
Lab ID: 1404590-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 4:22:00 PM	12707
Surr: 2-Fluorophenol	52.9	12.1-85.8		%REC	1	4/16/2014 4:22:00 PM	12707
Surr: Phenol-d5	33.8	17.7-65.8		%REC	1	4/16/2014 4:22:00 PM	12707
Surr: 2,4,6-Tribromophenol	70.0	26-138		%REC	1	4/16/2014 4:22:00 PM	12707
Surr: Nitrobenzene-d5	69.1	47.5-119		%REC	1	4/16/2014 4:22:00 PM	12707
Surr: 2-Fluorobiphenyl	69.6	48.1-106		%REC	1	4/16/2014 4:22:00 PM	12707
Surr: 4-Terphenyl-d14	72.2	44-113		%REC	1	4/16/2014 4:22:00 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	15000	500		µg/L	500	4/19/2014 5:25:35 AM	R18095
Toluene	7600	500		µg/L	500	4/19/2014 5:25:35 AM	R18095
Ethylbenzene	930	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Methyl tert-butyl ether (MTBE)	150	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2,4-Trimethylbenzene	410	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,3,5-Trimethylbenzene	62	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Naphthalene	ND	100		µg/L	50	4/19/2014 5:55:53 AM	R18095
1-Methylnaphthalene	ND	200		µg/L	50	4/19/2014 5:55:53 AM	R18095
2-Methylnaphthalene	ND	200		µg/L	50	4/19/2014 5:55:53 AM	R18095
Acetone	ND	500		µg/L	50	4/19/2014 5:55:53 AM	R18095
Bromobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Bromodichloromethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Bromoform	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Bromomethane	ND	150		µg/L	50	4/19/2014 5:55:53 AM	R18095
2-Butanone	ND	500		µg/L	50	4/19/2014 5:55:53 AM	R18095
Carbon disulfide	ND	500		µg/L	50	4/19/2014 5:55:53 AM	R18095
Carbon Tetrachloride	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Chlorobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Chloroethane	ND	100		µg/L	50	4/19/2014 5:55:53 AM	R18095
Chloroform	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Chloromethane	ND	150		µg/L	50	4/19/2014 5:55:53 AM	R18095
2-Chlorotoluene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
4-Chlorotoluene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
cis-1,2-DCE	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/19/2014 5:55:53 AM	R18095
Dibromochloromethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Dibromomethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 10:50:00 AM
Lab ID: 1404590-001
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,4-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Dichlorodifluoromethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1-Dichloroethane	65	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1-Dichloroethene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2-Dichloropropane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,3-Dichloropropane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
2,2-Dichloropropane	ND	100		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1-Dichloropropene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Hexachlorobutadiene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
2-Hexanone	ND	500		µg/L	50	4/19/2014 5:55:53 AM	R18095
Isopropylbenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
4-Isopropyltoluene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
4-Methyl-2-pentanone	ND	500		µg/L	50	4/19/2014 5:55:53 AM	R18095
Methylene Chloride	ND	150		µg/L	50	4/19/2014 5:55:53 AM	R18095
n-Butylbenzene	ND	150		µg/L	50	4/19/2014 5:55:53 AM	R18095
n-Propylbenzene	97	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
sec-Butylbenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Styrene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
tert-Butylbenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/19/2014 5:55:53 AM	R18095
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
trans-1,2-DCE	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1,1-Trichloroethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,1,2-Trichloroethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Trichloroethene (TCE)	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Trichlorofluoromethane	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
1,2,3-Trichloropropane	ND	100		µg/L	50	4/19/2014 5:55:53 AM	R18095
Vinyl chloride	ND	50		µg/L	50	4/19/2014 5:55:53 AM	R18095
Xylenes, Total	2200	75		µg/L	50	4/19/2014 5:55:53 AM	R18095
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	50	4/19/2014 5:55:53 AM	R18095
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	50	4/19/2014 5:55:53 AM	R18095
Surr: Dibromofluoromethane	105	70-130		%REC	50	4/19/2014 5:55:53 AM	R18095
Surr: Toluene-d8	97.6	70-130		%REC	50	4/19/2014 5:55:53 AM	R18095

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:00:00 PM
Lab ID: 1404590-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	4.5	1.0		mg/L	1	4/15/2014 12:29:33 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 12:29:33 PM	12688
Surr: DNOP	98.4	62.7-145		%REC	1	4/15/2014 12:29:33 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	9.4	0.50		mg/L	10	4/18/2014 12:01:47 AM	R18070
Surr: BFB	108	80.4-118		%REC	10	4/18/2014 12:01:47 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 4:51:35 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Carbazole	17	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:00:00 PM
Lab ID: 1404590-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 4:51:35 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 4:51:35 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 4:51:35 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
1-Methylnaphthalene	120	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2-Methylnaphthalene	160	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 4:51:35 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Naphthalene	230	20		µg/L	2	4/17/2014 9:18:19 AM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 4:51:35 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:00:00 PM
Lab ID: 1404590-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 4:51:35 PM	12707
Surr: 2-Fluorophenol	69.8	12.1-85.8		%REC	1	4/16/2014 4:51:35 PM	12707
Surr: Phenol-d5	43.4	17.7-65.8		%REC	1	4/16/2014 4:51:35 PM	12707
Surr: 2,4,6-Tribromophenol	92.0	26-138		%REC	1	4/16/2014 4:51:35 PM	12707
Surr: Nitrobenzene-d5	92.8	47.5-119		%REC	1	4/16/2014 4:51:35 PM	12707
Surr: 2-Fluorobiphenyl	89.4	48.1-106		%REC	1	4/16/2014 4:51:35 PM	12707
Surr: 4-Terphenyl-d14	90.7	44-113		%REC	1	4/16/2014 4:51:35 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	1000	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Toluene	25	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Ethylbenzene	800	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Methyl tert-butyl ether (MTBE)	2400	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2,4-Trimethylbenzene	510	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,3,5-Trimethylbenzene	94	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Naphthalene	430	40		µg/L	20	4/19/2014 7:56:35 AM	R18095
1-Methylnaphthalene	180	80		µg/L	20	4/19/2014 7:56:35 AM	R18095
2-Methylnaphthalene	280	80		µg/L	20	4/19/2014 7:56:35 AM	R18095
Acetone	ND	200		µg/L	20	4/19/2014 7:56:35 AM	R18095
Bromobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Bromodichloromethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Bromoform	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Bromomethane	ND	60		µg/L	20	4/19/2014 7:56:35 AM	R18095
2-Butanone	ND	200		µg/L	20	4/19/2014 7:56:35 AM	R18095
Carbon disulfide	ND	200		µg/L	20	4/19/2014 7:56:35 AM	R18095
Carbon Tetrachloride	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Chlorobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Chloroethane	ND	40		µg/L	20	4/19/2014 7:56:35 AM	R18095
Chloroform	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Chloromethane	ND	60		µg/L	20	4/19/2014 7:56:35 AM	R18095
2-Chlorotoluene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
4-Chlorotoluene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
cis-1,2-DCE	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
cis-1,3-Dichloropropene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	4/19/2014 7:56:35 AM	R18095
Dibromochloromethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Dibromomethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2-Dichlorobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:00:00 PM
Lab ID: 1404590-002
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,4-Dichlorobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Dichlorodifluoromethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1-Dichloroethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1-Dichloroethene	28	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2-Dichloropropane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,3-Dichloropropane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
2,2-Dichloropropane	ND	40		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1-Dichloropropene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Hexachlorobutadiene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
2-Hexanone	ND	200		µg/L	20	4/19/2014 7:56:35 AM	R18095
Isopropylbenzene	28	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
4-Isopropyltoluene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
4-Methyl-2-pentanone	ND	200		µg/L	20	4/19/2014 7:56:35 AM	R18095
Methylene Chloride	ND	60		µg/L	20	4/19/2014 7:56:35 AM	R18095
n-Butylbenzene	ND	60		µg/L	20	4/19/2014 7:56:35 AM	R18095
n-Propylbenzene	77	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
sec-Butylbenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Styrene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
tert-Butylbenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	4/19/2014 7:56:35 AM	R18095
Tetrachloroethene (PCE)	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
trans-1,2-DCE	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
trans-1,3-Dichloropropene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2,3-Trichlorobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2,4-Trichlorobenzene	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1,1-Trichloroethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,1,2-Trichloroethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Trichloroethene (TCE)	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Trichlorofluoromethane	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
1,2,3-Trichloropropane	ND	40		µg/L	20	4/19/2014 7:56:35 AM	R18095
Vinyl chloride	ND	20		µg/L	20	4/19/2014 7:56:35 AM	R18095
Xylenes, Total	1000	30		µg/L	20	4/19/2014 7:56:35 AM	R18095
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	20	4/19/2014 7:56:35 AM	R18095
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	20	4/19/2014 7:56:35 AM	R18095
Surr: Dibromofluoromethane	103	70-130		%REC	20	4/19/2014 7:56:35 AM	R18095
Surr: Toluene-d8	100	70-130		%REC	20	4/19/2014 7:56:35 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:45:00 PM
Lab ID: 1404590-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	16	1.0		mg/L	1	4/15/2014 1:00:01 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 1:00:01 PM	12688
Surr: DNOP	113	62.7-145		%REC	1	4/15/2014 1:00:01 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	120	5.0		mg/L	100	4/18/2014 12:30:19 AM	R18070
Surr: BFB	94.2	80.4-118		%REC	100	4/18/2014 12:30:19 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Acenaphthylene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Aniline	22	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Anthracene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Azobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Benz(a)anthracene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Benzo(a)pyrene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Benzo(b)fluoranthene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Benzo(g,h,i)perylene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Benzo(k)fluoranthene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Benzoic acid	ND	26		µg/L	1	4/21/2014 3:42:05 PM	12756
Benzyl alcohol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Bis(2-chloroethoxy)methane	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Bis(2-chloroethyl)ether	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Bis(2-chloroisopropyl)ether	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Bis(2-ethylhexyl)phthalate	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4-Bromophenyl phenyl ether	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Butyl benzyl phthalate	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Carbazole	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4-Chloro-3-methylphenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4-Chloroaniline	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2-Chloronaphthalene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2-Chlorophenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4-Chlorophenyl phenyl ether	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Chrysene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Di-n-butyl phthalate	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Di-n-octyl phthalate	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Dibenz(a,h)anthracene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Dibenzofuran	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
1,2-Dichlorobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
1,3-Dichlorobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:45:00 PM
Lab ID: 1404590-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
3,3´-Dichlorobenzidine	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Diethyl phthalate	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Dimethyl phthalate	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2,4-Dichlorophenol	ND	26		µg/L	1	4/21/2014 3:42:05 PM	12756
2,4-Dimethylphenol	130	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4,6-Dinitro-2-methylphenol	ND	26		µg/L	1	4/21/2014 3:42:05 PM	12756
2,4-Dinitrophenol	ND	26		µg/L	1	4/21/2014 3:42:05 PM	12756
2,4-Dinitrotoluene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2,6-Dinitrotoluene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Fluoranthene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Fluorene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Hexachlorobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Hexachlorobutadiene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Hexachlorocyclopentadiene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Hexachloroethane	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Indeno(1,2,3-cd)pyrene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Isophorone	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
1-Methylnaphthalene	88	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2-Methylnaphthalene	120	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2-Methylphenol	120	26		µg/L	1	4/21/2014 3:42:05 PM	12756
3+4-Methylphenol	76	13		µg/L	1	4/21/2014 3:42:05 PM	12756
N-Nitrosodi-n-propylamine	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
N-Nitrosodimethylamine	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
N-Nitrosodiphenylamine	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Naphthalene	250	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2-Nitroaniline	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
3-Nitroaniline	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4-Nitroaniline	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Nitrobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2-Nitrophenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
4-Nitrophenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Pentachlorophenol	ND	26		µg/L	1	4/21/2014 3:42:05 PM	12756
Phenanthrene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Phenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Pyrene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Pyridine	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
1,2,4-Trichlorobenzene	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
2,4,5-Trichlorophenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:45:00 PM
Lab ID: 1404590-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	13		µg/L	1	4/21/2014 3:42:05 PM	12756
Surr: 2-Fluorophenol	0	12.1-85.8	S	%REC	1	4/21/2014 3:42:05 PM	12756
Surr: Phenol-d5	0.130	17.7-65.8	S	%REC	1	4/21/2014 3:42:05 PM	12756
Surr: 2,4,6-Tribromophenol	1.76	26-138	S	%REC	1	4/21/2014 3:42:05 PM	12756
Surr: Nitrobenzene-d5	95.0	47.5-119		%REC	1	4/21/2014 3:42:05 PM	12756
Surr: 2-Fluorobiphenyl	109	48.1-106	S	%REC	1	4/21/2014 3:42:05 PM	12756
Surr: 4-Terphenyl-d14	90.7	44-113		%REC	1	4/21/2014 3:42:05 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	25000	500		µg/L	500	4/19/2014 8:26:34 AM	R18095
Toluene	17000	500		µg/L	500	4/19/2014 8:26:34 AM	R18095
Ethylbenzene	2800	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Methyl tert-butyl ether (MTBE)	380	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2,4-Trimethylbenzene	1900	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,3,5-Trimethylbenzene	500	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Naphthalene	300	100		µg/L	50	4/19/2014 8:56:43 AM	R18095
1-Methylnaphthalene	ND	200		µg/L	50	4/19/2014 8:56:43 AM	R18095
2-Methylnaphthalene	ND	200		µg/L	50	4/19/2014 8:56:43 AM	R18095
Acetone	ND	500		µg/L	50	4/19/2014 8:56:43 AM	R18095
Bromobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Bromodichloromethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Bromoform	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Bromomethane	ND	150		µg/L	50	4/19/2014 8:56:43 AM	R18095
2-Butanone	ND	500		µg/L	50	4/19/2014 8:56:43 AM	R18095
Carbon disulfide	ND	500		µg/L	50	4/19/2014 8:56:43 AM	R18095
Carbon Tetrachloride	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Chlorobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Chloroethane	ND	100		µg/L	50	4/19/2014 8:56:43 AM	R18095
Chloroform	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Chloromethane	ND	150		µg/L	50	4/19/2014 8:56:43 AM	R18095
2-Chlorotoluene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
4-Chlorotoluene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
cis-1,2-DCE	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/19/2014 8:56:43 AM	R18095
Dibromochloromethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Dibromomethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 1:45:00 PM
Lab ID: 1404590-003
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,4-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Dichlorodifluoromethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1-Dichloroethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1-Dichloroethene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2-Dichloropropane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,3-Dichloropropane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
2,2-Dichloropropane	ND	100		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1-Dichloropropene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Hexachlorobutadiene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
2-Hexanone	ND	500		µg/L	50	4/19/2014 8:56:43 AM	R18095
Isopropylbenzene	76	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
4-Isopropyltoluene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
4-Methyl-2-pentanone	ND	500		µg/L	50	4/19/2014 8:56:43 AM	R18095
Methylene Chloride	ND	150		µg/L	50	4/19/2014 8:56:43 AM	R18095
n-Butylbenzene	ND	150		µg/L	50	4/19/2014 8:56:43 AM	R18095
n-Propylbenzene	260	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
sec-Butylbenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Styrene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
tert-Butylbenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/19/2014 8:56:43 AM	R18095
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
trans-1,2-DCE	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1,1-Trichloroethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,1,2-Trichloroethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Trichloroethene (TCE)	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Trichlorofluoromethane	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
1,2,3-Trichloropropane	ND	100		µg/L	50	4/19/2014 8:56:43 AM	R18095
Vinyl chloride	ND	50		µg/L	50	4/19/2014 8:56:43 AM	R18095
Xylenes, Total	14000	75		µg/L	50	4/19/2014 8:56:43 AM	R18095
Surr: 1,2-Dichloroethane-d4	118	70-130		%REC	50	4/19/2014 8:56:43 AM	R18095
Surr: 4-Bromofluorobenzene	102	70-130		%REC	50	4/19/2014 8:56:43 AM	R18095
Surr: Dibromofluoromethane	107	70-130		%REC	50	4/19/2014 8:56:43 AM	R18095
Surr: Toluene-d8	101	70-130		%REC	50	4/19/2014 8:56:43 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP02
Project: Hydrocarbon Seep
Collection Date: 4/11/2014
Lab ID: 1404590-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.7	1.0		mg/L	1	4/15/2014 1:30:36 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 1:30:36 PM	12688
Surr: DNOP	112	62.7-145		%REC	1	4/15/2014 1:30:36 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	52	5.0		mg/L	100	4/18/2014 12:58:50 AM	R18070
Surr: BFB	91.8	80.4-118		%REC	100	4/18/2014 12:58:50 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Aniline	20	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 5:50:37 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP02
Project: Hydrocarbon Seep
Collection Date: 4/11/2014
Lab ID: 1404590-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 5:50:37 PM	12707
2,4-Dimethylphenol	69	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 5:50:37 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 5:50:37 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
1-Methylnaphthalene	10	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2-Methylphenol	140	20		µg/L	1	4/16/2014 5:50:37 PM	12707
3+4-Methylphenol	110	10		µg/L	1	4/16/2014 5:50:37 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Naphthalene	36	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 5:50:37 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Phenol	20	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP02
Project: Hydrocarbon Seep
Collection Date: 4/11/2014
Lab ID: 1404590-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 5:50:37 PM	12707
Surr: 2-Fluorophenol	45.1	12.1-85.8		%REC	1	4/16/2014 5:50:37 PM	12707
Surr: Phenol-d5	30.8	17.7-65.8		%REC	1	4/16/2014 5:50:37 PM	12707
Surr: 2,4,6-Tribromophenol	68.4	26-138		%REC	1	4/16/2014 5:50:37 PM	12707
Surr: Nitrobenzene-d5	65.7	47.5-119		%REC	1	4/16/2014 5:50:37 PM	12707
Surr: 2-Fluorobiphenyl	66.5	48.1-106		%REC	1	4/16/2014 5:50:37 PM	12707
Surr: 4-Terphenyl-d14	66.9	44-113		%REC	1	4/16/2014 5:50:37 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	15000	500		µg/L	500	4/19/2014 9:57:13 AM	R18095
Toluene	8000	500		µg/L	500	4/19/2014 9:57:13 AM	R18095
Ethylbenzene	950	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Methyl tert-butyl ether (MTBE)	140	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2,4-Trimethylbenzene	380	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,3,5-Trimethylbenzene	60	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Naphthalene	ND	100		µg/L	50	4/19/2014 10:27:15 AM	R18095
1-Methylnaphthalene	ND	200		µg/L	50	4/19/2014 10:27:15 AM	R18095
2-Methylnaphthalene	ND	200		µg/L	50	4/19/2014 10:27:15 AM	R18095
Acetone	ND	500		µg/L	50	4/19/2014 10:27:15 AM	R18095
Bromobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Bromodichloromethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Bromoform	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Bromomethane	ND	150		µg/L	50	4/19/2014 10:27:15 AM	R18095
2-Butanone	ND	500		µg/L	50	4/19/2014 10:27:15 AM	R18095
Carbon disulfide	ND	500		µg/L	50	4/19/2014 10:27:15 AM	R18095
Carbon Tetrachloride	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Chlorobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Chloroethane	ND	100		µg/L	50	4/19/2014 10:27:15 AM	R18095
Chloroform	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Chloromethane	ND	150		µg/L	50	4/19/2014 10:27:15 AM	R18095
2-Chlorotoluene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
4-Chlorotoluene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
cis-1,2-DCE	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/19/2014 10:27:15 AM	R18095
Dibromochloromethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Dibromomethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP02
Project: Hydrocarbon Seep
Collection Date: 4/11/2014
Lab ID: 1404590-004
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,4-Dichlorobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Dichlorodifluoromethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1-Dichloroethane	64	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1-Dichloroethene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2-Dichloropropane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,3-Dichloropropane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
2,2-Dichloropropane	ND	100		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1-Dichloropropene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Hexachlorobutadiene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
2-Hexanone	ND	500		µg/L	50	4/19/2014 10:27:15 AM	R18095
Isopropylbenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
4-Isopropyltoluene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
4-Methyl-2-pentanone	ND	500		µg/L	50	4/19/2014 10:27:15 AM	R18095
Methylene Chloride	ND	150		µg/L	50	4/19/2014 10:27:15 AM	R18095
n-Butylbenzene	ND	150		µg/L	50	4/19/2014 10:27:15 AM	R18095
n-Propylbenzene	100	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
sec-Butylbenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Styrene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
tert-Butylbenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/19/2014 10:27:15 AM	R18095
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
trans-1,2-DCE	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1,1-Trichloroethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,1,2-Trichloroethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Trichloroethene (TCE)	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Trichlorofluoromethane	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
1,2,3-Trichloropropane	ND	100		µg/L	50	4/19/2014 10:27:15 AM	R18095
Vinyl chloride	ND	50		µg/L	50	4/19/2014 10:27:15 AM	R18095
Xylenes, Total	2100	75		µg/L	50	4/19/2014 10:27:15 AM	R18095
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	50	4/19/2014 10:27:15 AM	R18095
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	50	4/19/2014 10:27:15 AM	R18095
Surr: Dibromofluoromethane	98.2	70-130		%REC	50	4/19/2014 10:27:15 AM	R18095
Surr: Toluene-d8	100	70-130		%REC	50	4/19/2014 10:27:15 AM	R18095

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 2:30:00 PM
Lab ID: 1404590-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	27	1.0		mg/L	1	4/15/2014 2:56:06 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 2:56:06 PM	12688
Surr: DNOP	111	62.7-145		%REC	1	4/15/2014 2:56:06 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	78	5.0		mg/L	100	4/18/2014 1:27:22 AM	R18070
Surr: BFB	97.7	80.4-118		%REC	100	4/18/2014 1:27:22 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Acenaphthylene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Aniline	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Anthracene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Azobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Benz(a)anthracene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Benzo(a)pyrene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Benzo(b)fluoranthene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Benzo(g,h,i)perylene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Benzo(k)fluoranthene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Benzoic acid	ND	25		µg/L	1	4/21/2014 4:12:09 PM	12756
Benzyl alcohol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Bis(2-chloroethoxy)methane	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Bis(2-chloroethyl)ether	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Bis(2-chloroisopropyl)ether	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Bis(2-ethylhexyl)phthalate	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4-Bromophenyl phenyl ether	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Butyl benzyl phthalate	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Carbazole	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4-Chloro-3-methylphenol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4-Chloroaniline	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2-Chloronaphthalene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2-Chlorophenol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4-Chlorophenyl phenyl ether	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Chrysene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Di-n-butyl phthalate	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Di-n-octyl phthalate	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Dibenz(a,h)anthracene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Dibenzofuran	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
1,2-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
1,3-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 2:30:00 PM
Lab ID: 1404590-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
3,3´-Dichlorobenzidine	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Diethyl phthalate	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Dimethyl phthalate	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2,4-Dichlorophenol	ND	25		µg/L	1	4/21/2014 4:12:09 PM	12756
2,4-Dimethylphenol	100	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4,6-Dinitro-2-methylphenol	ND	25		µg/L	1	4/21/2014 4:12:09 PM	12756
2,4-Dinitrophenol	ND	25		µg/L	1	4/21/2014 4:12:09 PM	12756
2,4-Dinitrotoluene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2,6-Dinitrotoluene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Fluoranthene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Fluorene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Hexachlorobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Hexachlorobutadiene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Hexachlorocyclopentadiene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Hexachloroethane	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Indeno(1,2,3-cd)pyrene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Isophorone	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
1-Methylnaphthalene	69	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2-Methylnaphthalene	110	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2-Methylphenol	140	25		µg/L	1	4/21/2014 4:12:09 PM	12756
3+4-Methylphenol	100	12		µg/L	1	4/21/2014 4:12:09 PM	12756
N-Nitrosodi-n-propylamine	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
N-Nitrosodimethylamine	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
N-Nitrosodiphenylamine	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Naphthalene	270	20		µg/L	2	4/22/2014 9:39:20 AM	12707
2-Nitroaniline	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
3-Nitroaniline	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4-Nitroaniline	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Nitrobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2-Nitrophenol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
4-Nitrophenol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Pentachlorophenol	ND	25		µg/L	1	4/21/2014 4:12:09 PM	12756
Phenanthrene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Phenol	13	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Pyrene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Pyridine	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
1,2,4-Trichlorobenzene	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
2,4,5-Trichlorophenol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 2:30:00 PM
Lab ID: 1404590-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	12		µg/L	1	4/21/2014 4:12:09 PM	12756
Surr: 2-Fluorophenol	3.75	12.1-85.8	S	%REC	1	4/21/2014 4:12:09 PM	12756
Surr: Phenol-d5	11.6	17.7-65.8	S	%REC	1	4/21/2014 4:12:09 PM	12756
Surr: 2,4,6-Tribromophenol	2.24	26-138	S	%REC	1	4/21/2014 4:12:09 PM	12756
Surr: Nitrobenzene-d5	85.0	47.5-119		%REC	1	4/21/2014 4:12:09 PM	12756
Surr: 2-Fluorobiphenyl	97.2	48.1-106		%REC	1	4/21/2014 4:12:09 PM	12756
Surr: 4-Terphenyl-d14	84.5	44-113		%REC	1	4/21/2014 4:12:09 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	7200	500	P	µg/L	500	4/21/2014 5:23:32 PM	R18123
Toluene	13000	500	P	µg/L	500	4/21/2014 5:23:32 PM	R18123
Ethylbenzene	2100	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Methyl tert-butyl ether (MTBE)	580	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2,4-Trimethylbenzene	2200	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,3,5-Trimethylbenzene	600	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2-Dichloroethane (EDC)	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2-Dibromoethane (EDB)	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Naphthalene	490	100	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1-Methylnaphthalene	ND	200	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
2-Methylnaphthalene	ND	200	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Acetone	ND	500	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Bromobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Bromodichloromethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Bromoform	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Bromomethane	ND	150	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
2-Butanone	ND	500	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Carbon disulfide	ND	500	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Carbon Tetrachloride	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Chlorobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Chloroethane	ND	100	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Chloroform	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Chloromethane	ND	150	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
2-Chlorotoluene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
4-Chlorotoluene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
cis-1,2-DCE	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
cis-1,3-Dichloropropene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2-Dibromo-3-chloropropane	ND	100	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Dibromochloromethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Dibromomethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2-Dichlorobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 2:30:00 PM
Lab ID: 1404590-005
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,4-Dichlorobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Dichlorodifluoromethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1-Dichloroethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1-Dichloroethene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2-Dichloropropane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,3-Dichloropropane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
2,2-Dichloropropane	ND	100	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1-Dichloropropene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Hexachlorobutadiene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
2-Hexanone	ND	500	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Isopropylbenzene	100	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
4-Isopropyltoluene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
4-Methyl-2-pentanone	ND	500	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Methylene Chloride	ND	150	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
n-Butylbenzene	ND	150	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
n-Propylbenzene	380	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
sec-Butylbenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Styrene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
tert-Butylbenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1,1,2-Tetrachloroethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1,2,2-Tetrachloroethane	ND	100	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Tetrachloroethene (PCE)	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
trans-1,2-DCE	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
trans-1,3-Dichloropropene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2,3-Trichlorobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2,4-Trichlorobenzene	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1,1-Trichloroethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,1,2-Trichloroethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Trichloroethene (TCE)	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Trichlorofluoromethane	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
1,2,3-Trichloropropane	ND	100	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Vinyl chloride	ND	50	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Xylenes, Total	11000	75	P	µg/L	50	4/21/2014 5:53:36 PM	R18123
Surr: 1,2-Dichloroethane-d4	128	70-130	P	%REC	50	4/21/2014 5:53:36 PM	R18123
Surr: 4-Bromofluorobenzene	103	70-130	P	%REC	50	4/21/2014 5:53:36 PM	R18123
Surr: Dibromofluoromethane	109	70-130	P	%REC	50	4/21/2014 5:53:36 PM	R18123
Surr: Toluene-d8	98.1	70-130	P	%REC	50	4/21/2014 5:53:36 PM	R18123

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:00:00 PM
Lab ID: 1404590-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	5.9	1.0		mg/L	1	4/15/2014 3:26:26 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 3:26:26 PM	12688
Surr: DNOP	120	62.7-145		%REC	1	4/15/2014 3:26:26 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	88	10		mg/L	200	4/18/2014 1:55:52 AM	R18070
Surr: BFB	92.2	80.4-118		%REC	200	4/18/2014 1:55:52 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Acenaphthylene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Aniline	75	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Anthracene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Azobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Benz(a)anthracene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Benzo(a)pyrene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Benzo(b)fluoranthene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Benzo(g,h,i)perylene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Benzo(k)fluoranthene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Benzoic acid	ND	23		µg/L	1	4/21/2014 4:42:18 PM	12756
Benzyl alcohol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Bis(2-chloroethoxy)methane	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Bis(2-chloroethyl)ether	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Bis(2-chloroisopropyl)ether	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Bis(2-ethylhexyl)phthalate	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4-Bromophenyl phenyl ether	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Butyl benzyl phthalate	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Carbazole	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4-Chloro-3-methylphenol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4-Chloroaniline	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2-Chloronaphthalene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2-Chlorophenol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4-Chlorophenyl phenyl ether	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Chrysene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Di-n-butyl phthalate	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Di-n-octyl phthalate	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Dibenz(a,h)anthracene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Dibenzofuran	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
1,2-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
1,3-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:00:00 PM
Lab ID: 1404590-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
3,3´-Dichlorobenzidine	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Diethyl phthalate	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Dimethyl phthalate	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2,4-Dichlorophenol	ND	23		µg/L	1	4/21/2014 4:42:18 PM	12756
2,4-Dimethylphenol	120	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4,6-Dinitro-2-methylphenol	ND	23		µg/L	1	4/21/2014 4:42:18 PM	12756
2,4-Dinitrophenol	ND	23		µg/L	1	4/21/2014 4:42:18 PM	12756
2,4-Dinitrotoluene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2,6-Dinitrotoluene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Fluoranthene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Fluorene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Hexachlorobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Hexachlorobutadiene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Hexachlorocyclopentadiene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Hexachloroethane	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Indeno(1,2,3-cd)pyrene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Isophorone	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
1-Methylnaphthalene	42	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2-Methylnaphthalene	56	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2-Methylphenol	300	100		µg/L	5	4/22/2014 10:08:19 AM	12707
3+4-Methylphenol	260	50		µg/L	5	4/22/2014 10:08:19 AM	12707
N-Nitrosodi-n-propylamine	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
N-Nitrosodimethylamine	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
N-Nitrosodiphenylamine	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Naphthalene	140	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2-Nitroaniline	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
3-Nitroaniline	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4-Nitroaniline	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Nitrobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2-Nitrophenol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
4-Nitrophenol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Pentachlorophenol	ND	23		µg/L	1	4/21/2014 4:42:18 PM	12756
Phenanthrene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Phenol	61	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Pyrene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Pyridine	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
1,2,4-Trichlorobenzene	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
2,4,5-Trichlorophenol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:00:00 PM
Lab ID: 1404590-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	12		µg/L	1	4/21/2014 4:42:18 PM	12756
Surr: 2-Fluorophenol	2.35	12.1-85.8	S	%REC	1	4/21/2014 4:42:18 PM	12756
Surr: Phenol-d5	8.98	17.7-65.8	S	%REC	1	4/21/2014 4:42:18 PM	12756
Surr: 2,4,6-Tribromophenol	2.00	26-138	S	%REC	1	4/21/2014 4:42:18 PM	12756
Surr: Nitrobenzene-d5	96.7	47.5-119		%REC	1	4/21/2014 4:42:18 PM	12756
Surr: 2-Fluorobiphenyl	95.3	48.1-106		%REC	1	4/21/2014 4:42:18 PM	12756
Surr: 4-Terphenyl-d14	79.7	44-113		%REC	1	4/21/2014 4:42:18 PM	12756
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	14000	500		µg/L	500	4/21/2014 6:53:47 PM	R18123
Toluene	19000	500		µg/L	500	4/21/2014 6:53:47 PM	R18123
Ethylbenzene	1500	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2,4-Trimethylbenzene	960	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,3,5-Trimethylbenzene	210	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Naphthalene	200	100		µg/L	50	4/21/2014 7:23:52 PM	R18123
1-Methylnaphthalene	ND	200		µg/L	50	4/21/2014 7:23:52 PM	R18123
2-Methylnaphthalene	ND	200		µg/L	50	4/21/2014 7:23:52 PM	R18123
Acetone	1200	500		µg/L	50	4/21/2014 7:23:52 PM	R18123
Bromobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Bromodichloromethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Bromoform	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Bromomethane	ND	150		µg/L	50	4/21/2014 7:23:52 PM	R18123
2-Butanone	1000	500		µg/L	50	4/21/2014 7:23:52 PM	R18123
Carbon disulfide	ND	500		µg/L	50	4/21/2014 7:23:52 PM	R18123
Carbon Tetrachloride	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Chlorobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Chloroethane	ND	100		µg/L	50	4/21/2014 7:23:52 PM	R18123
Chloroform	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Chloromethane	ND	150		µg/L	50	4/21/2014 7:23:52 PM	R18123
2-Chlorotoluene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
4-Chlorotoluene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
cis-1,2-DCE	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/21/2014 7:23:52 PM	R18123
Dibromochloromethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Dibromomethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2-Dichlorobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:00:00 PM
Lab ID: 1404590-006
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,4-Dichlorobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Dichlorodifluoromethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1-Dichloroethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1-Dichloroethene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2-Dichloropropane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,3-Dichloropropane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
2,2-Dichloropropane	ND	100		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1-Dichloropropene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Hexachlorobutadiene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
2-Hexanone	ND	500		µg/L	50	4/21/2014 7:23:52 PM	R18123
Isopropylbenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
4-Isopropyltoluene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
4-Methyl-2-pentanone	ND	500		µg/L	50	4/21/2014 7:23:52 PM	R18123
Methylene Chloride	ND	150		µg/L	50	4/21/2014 7:23:52 PM	R18123
n-Butylbenzene	ND	150		µg/L	50	4/21/2014 7:23:52 PM	R18123
n-Propylbenzene	130	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
sec-Butylbenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Styrene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
tert-Butylbenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/21/2014 7:23:52 PM	R18123
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
trans-1,2-DCE	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1,1-Trichloroethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,1,2-Trichloroethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Trichloroethene (TCE)	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Trichlorofluoromethane	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
1,2,3-Trichloropropane	ND	100		µg/L	50	4/21/2014 7:23:52 PM	R18123
Vinyl chloride	ND	50		µg/L	50	4/21/2014 7:23:52 PM	R18123
Xylenes, Total	6900	75		µg/L	50	4/21/2014 7:23:52 PM	R18123
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	50	4/21/2014 7:23:52 PM	R18123
Surr: 4-Bromofluorobenzene	103	70-130		%REC	50	4/21/2014 7:23:52 PM	R18123
Surr: Dibromofluoromethane	100	70-130		%REC	50	4/21/2014 7:23:52 PM	R18123
Surr: Toluene-d8	105	70-130		%REC	50	4/21/2014 7:23:52 PM	R18123

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:20:00 PM
Lab ID: 1404590-007
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 3:57:00 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 3:57:00 PM	12688
Surr: DNOP	110	62.7-145		%REC	1	4/15/2014 3:57:00 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/18/2014 2:24:26 AM	R18070
Surr: BFB	87.3	80.4-118		%REC	1	4/18/2014 2:24:26 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 7:19:03 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:20:00 PM
Lab ID: 1404590-007
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 7:19:03 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 7:19:03 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 7:19:03 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 7:19:03 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Naphthalene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 7:19:03 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:20:00 PM
Lab ID: 1404590-007
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 7:19:03 PM	12707
Surr: 2-Fluorophenol	62.0	12.1-85.8		%REC	1	4/16/2014 7:19:03 PM	12707
Surr: Phenol-d5	42.9	17.7-65.8		%REC	1	4/16/2014 7:19:03 PM	12707
Surr: 2,4,6-Tribromophenol	93.8	26-138		%REC	1	4/16/2014 7:19:03 PM	12707
Surr: Nitrobenzene-d5	91.0	47.5-119		%REC	1	4/16/2014 7:19:03 PM	12707
Surr: 2-Fluorobiphenyl	86.4	48.1-106		%REC	1	4/16/2014 7:19:03 PM	12707
Surr: 4-Terphenyl-d14	94.2	44-113		%REC	1	4/16/2014 7:19:03 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Toluene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Ethylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Naphthalene	ND	2.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1-Methylnaphthalene	ND	4.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
2-Methylnaphthalene	ND	4.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Acetone	ND	10		µg/L	1	4/21/2014 8:24:07 PM	R18123
Bromobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Bromodichloromethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Bromoform	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Bromomethane	ND	3.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
2-Butanone	ND	10		µg/L	1	4/21/2014 8:24:07 PM	R18123
Carbon disulfide	ND	10		µg/L	1	4/21/2014 8:24:07 PM	R18123
Carbon Tetrachloride	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Chlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Chloroethane	ND	2.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Chloroform	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Chloromethane	ND	3.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
2-Chlorotoluene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
4-Chlorotoluene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
cis-1,2-DCE	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Dibromochloromethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Dibromomethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:20:00 PM
Lab ID: 1404590-007
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1-Dichloroethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1-Dichloroethene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2-Dichloropropane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,3-Dichloropropane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
2,2-Dichloropropane	ND	2.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Hexachlorobutadiene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
2-Hexanone	ND	10		µg/L	1	4/21/2014 8:24:07 PM	R18123
Isopropylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
4-Isopropyltoluene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
4-Methyl-2-pentanone	ND	10		µg/L	1	4/21/2014 8:24:07 PM	R18123
Methylene Chloride	ND	3.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
n-Butylbenzene	ND	3.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
n-Propylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
sec-Butylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Styrene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
tert-Butylbenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
trans-1,2-DCE	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Trichlorofluoromethane	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Vinyl chloride	ND	1.0		µg/L	1	4/21/2014 8:24:07 PM	R18123
Xylenes, Total	ND	1.5		µg/L	1	4/21/2014 8:24:07 PM	R18123
Surr: 1,2-Dichloroethane-d4	113	70-130		%REC	1	4/21/2014 8:24:07 PM	R18123
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	4/21/2014 8:24:07 PM	R18123
Surr: Dibromofluoromethane	108	70-130		%REC	1	4/21/2014 8:24:07 PM	R18123
Surr: Toluene-d8	101	70-130		%REC	1	4/21/2014 8:24:07 PM	R18123

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:40:00 PM
Lab ID: 1404590-008
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 4:27:41 PM	12688
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 4:27:41 PM	12688
Surr: DNOP	107	62.7-145		%REC	1	4/15/2014 4:27:41 PM	12688
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/18/2014 2:53:03 AM	R18070
Surr: BFB	86.5	80.4-118		%REC	1	4/18/2014 2:53:03 AM	R18070
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 7:48:14 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:40:00 PM
Lab ID: 1404590-008
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 7:48:14 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 7:48:14 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 7:48:14 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 7:48:14 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Naphthalene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 7:48:14 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:40:00 PM
Lab ID: 1404590-008
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 7:48:14 PM	12707
Surr: 2-Fluorophenol	60.8	12.1-85.8		%REC	1	4/16/2014 7:48:14 PM	12707
Surr: Phenol-d5	45.0	17.7-65.8		%REC	1	4/16/2014 7:48:14 PM	12707
Surr: 2,4,6-Tribromophenol	72.1	26-138		%REC	1	4/16/2014 7:48:14 PM	12707
Surr: Nitrobenzene-d5	103	47.5-119		%REC	1	4/16/2014 7:48:14 PM	12707
Surr: 2-Fluorobiphenyl	94.8	48.1-106		%REC	1	4/16/2014 7:48:14 PM	12707
Surr: 4-Terphenyl-d14	96.8	44-113		%REC	1	4/16/2014 7:48:14 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Toluene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Ethylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Naphthalene	ND	2.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1-Methylnaphthalene	ND	4.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
2-Methylnaphthalene	ND	4.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Acetone	ND	10		µg/L	1	4/21/2014 8:54:22 PM	R18123
Bromobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Bromodichloromethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Bromoform	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Bromomethane	ND	3.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
2-Butanone	ND	10		µg/L	1	4/21/2014 8:54:22 PM	R18123
Carbon disulfide	ND	10		µg/L	1	4/21/2014 8:54:22 PM	R18123
Carbon Tetrachloride	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Chlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Chloroethane	ND	2.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Chloroform	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Chloromethane	ND	3.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
2-Chlorotoluene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
4-Chlorotoluene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
cis-1,2-DCE	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Dibromochloromethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Dibromomethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB03
Project: Hydrocarbon Seep
Collection Date: 4/11/2014 3:40:00 PM
Lab ID: 1404590-008
Matrix: AQUEOUS
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1-Dichloroethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1-Dichloroethene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2-Dichloropropane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,3-Dichloropropane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
2,2-Dichloropropane	ND	2.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Hexachlorobutadiene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
2-Hexanone	ND	10		µg/L	1	4/21/2014 8:54:22 PM	R18123
Isopropylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
4-Isopropyltoluene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
4-Methyl-2-pentanone	ND	10		µg/L	1	4/21/2014 8:54:22 PM	R18123
Methylene Chloride	ND	3.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
n-Butylbenzene	ND	3.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
n-Propylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
sec-Butylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Styrene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
tert-Butylbenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
trans-1,2-DCE	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Trichlorofluoromethane	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Vinyl chloride	ND	1.0		µg/L	1	4/21/2014 8:54:22 PM	R18123
Xylenes, Total	ND	1.5		µg/L	1	4/21/2014 8:54:22 PM	R18123
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	4/21/2014 8:54:22 PM	R18123
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	1	4/21/2014 8:54:22 PM	R18123
Surr: Dibromofluoromethane	106	70-130		%REC	1	4/21/2014 8:54:22 PM	R18123
Surr: Toluene-d8	100	70-130		%REC	1	4/21/2014 8:54:22 PM	R18123

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404590-009
Matrix: TRIP BLANK
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Toluene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Ethylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Naphthalene	ND	2.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1-Methylnaphthalene	ND	4.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
2-Methylnaphthalene	ND	4.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Acetone	ND	10		µg/L	1	4/21/2014 9:24:40 PM	R18123
Bromobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Bromodichloromethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Bromoform	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Bromomethane	ND	3.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
2-Butanone	ND	10		µg/L	1	4/21/2014 9:24:40 PM	R18123
Carbon disulfide	ND	10		µg/L	1	4/21/2014 9:24:40 PM	R18123
Carbon Tetrachloride	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Chlorobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Chloroethane	ND	2.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Chloroform	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Chloromethane	ND	3.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
2-Chlorotoluene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
4-Chlorotoluene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
cis-1,2-DCE	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Dibromochloromethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Dibromomethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,1-Dichloroethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,1-Dichloroethene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2-Dichloropropane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,3-Dichloropropane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
2,2-Dichloropropane	ND	2.0		µg/L	1	4/21/2014 9:24:40 PM	R18123

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404590-009
Matrix: TRIP BLANK
Received Date: 4/12/2014 8:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Hexachlorobutadiene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
2-Hexanone	ND	10		µg/L	1	4/21/2014 9:24:40 PM	R18123
Isopropylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
4-Isopropyltoluene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
4-Methyl-2-pentanone	ND	10		µg/L	1	4/21/2014 9:24:40 PM	R18123
Methylene Chloride	ND	3.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
n-Butylbenzene	ND	3.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
n-Propylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
sec-Butylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Styrene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
tert-Butylbenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
trans-1,2-DCE	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Trichlorofluoromethane	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Vinyl chloride	ND	1.0		µg/L	1	4/21/2014 9:24:40 PM	R18123
Xylenes, Total	ND	1.5		µg/L	1	4/21/2014 9:24:40 PM	R18123
Surr: 1,2-Dichloroethane-d4	109	70-130		%REC	1	4/21/2014 9:24:40 PM	R18123
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	4/21/2014 9:24:40 PM	R18123
Surr: Dibromofluoromethane	95.1	70-130		%REC	1	4/21/2014 9:24:40 PM	R18123
Surr: Toluene-d8	94.7	70-130		%REC	1	4/21/2014 9:24:40 PM	R18123

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

Qualifiers:

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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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12688** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519168** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		103	62.7	145			

Sample ID **LCS-12688** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519169** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	96.4	78.6	146			
Surr: DNOP	0.48		0.5000		95.7	62.7	145			

Sample ID **LCSD-12688** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **12688** RunNo: **17992**
Prep Date: **4/14/2014** Analysis Date: **4/15/2014** SeqNo: **519170** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	114	78.6	146	17.0	26.5	
Surr: DNOP	0.51		0.5000		103	62.7	145	0	0	

Qualifiers:

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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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ML-RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R18070** RunNo: **18070**
Prep Date: Analysis Date: **4/17/2014** SeqNo: **521323** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.4	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R18070** RunNo: **18070**
Prep Date: Analysis Date: **4/17/2014** SeqNo: **521324** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	103	80	120			
Surr: BFB	19		20.00		95.1	80.4	118			

Sample ID **1404590-001B MS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-11** Batch ID: **R18070** RunNo: **18070**
Prep Date: Analysis Date: **4/17/2014** SeqNo: **521326** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	97	5.0	50.00	53.48	86.8	79	121			
Surr: BFB	2000		2000		99.1	80.4	118			

Sample ID **1404590-001B MSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-11** Batch ID: **R18070** RunNo: **18070**
Prep Date: Analysis Date: **4/17/2014** SeqNo: **521327** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	96	5.0	50.00	53.48	85.8	79	121	0.538	20	
Surr: BFB	2000		2000		97.8	80.4	118	0	0	

Qualifiers:

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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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18095**	RunNo: **18095**			
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522409**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R18095**	RunNo: **18095**
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522409** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.1	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Sample ID **100nglcs,200ngann**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R18095**	RunNo: **18095**
Prep Date:	Analysis Date: **4/18/2014**	SeqNo: **522411** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	18	1.0	20.00	0	91.4	80	120			
Chlorobenzene	19	1.0	20.00	0	93.6	70	130			

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100nglcs,200ngann** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18095** RunNo: **18095**
Prep Date: Analysis Date: **4/18/2014** SeqNo: **522411** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	121	90	143			
Trichloroethene (TCE)	19	1.0	20.00	0	95.2	70	130			
Surr: 1,2-Dichloroethane-d4	6.2		10.00		61.7	70	130			S
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.6	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Sample ID **1404590-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-11** Batch ID: **R18095** RunNo: **18095**
Prep Date: Analysis Date: **4/19/2014** SeqNo: **522427** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17000	50	1000	15390	119	70	130			E
Toluene	8500	50	1000	7746	76.1	67.5	123			E
Chlorobenzene	980	50	1000	0	98.4	70	130			
1,1-Dichloroethene	1400	50	1000	0	137	81.9	134			S
Trichloroethene (TCE)	1100	50	1000	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	610		500.0		122	70	130			
Surr: 4-Bromofluorobenzene	510		500.0		103	70	130			
Surr: Dibromofluoromethane	490		500.0		98.4	70	130			
Surr: Toluene-d8	480		500.0		96.9	70	130			

Sample ID **1404590-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-11** Batch ID: **R18095** RunNo: **18095**
Prep Date: Analysis Date: **4/19/2014** SeqNo: **522428** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	15000	50	1000	15390	-32.2	70	130	9.58	20	ES
Toluene	7700	50	1000	7746	-4.30	67.5	123	9.91	20	ES
Chlorobenzene	920	50	1000	0	91.8	70	130	6.98	20	
1,1-Dichloroethene	1200	50	1000	0	124	81.9	134	10.4	20	
Trichloroethene (TCE)	970	50	1000	0	96.8	70	130	8.16	20	
Surr: 1,2-Dichloroethane-d4	530		500.0		106	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		96.9	70	130	0	0	
Surr: Dibromofluoromethane	440		500.0		89.0	70	130	0	0	
Surr: Toluene-d8	480		500.0		95.7	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.
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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18123**	RunNo: **18123**			
Prep Date:	Analysis Date: **4/21/2014**	SeqNo: **523124**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18123** RunNo: **18123**
Prep Date: Analysis Date: **4/21/2014** SeqNo: **523124** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.3		10.00		93.0	70	130			

Sample ID **100nglcs,200ngann** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18123** RunNo: **18123**
Prep Date: Analysis Date: **4/21/2014** SeqNo: **523126** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	19	1.0	20.00	0	96.0	80	120			
Chlorobenzene	19	1.0	20.00	0	97.2	70	130			

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100nglcs,200ngann** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18123** RunNo: **18123**
Prep Date: Analysis Date: **4/21/2014** SeqNo: **523126** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	25	1.0	20.00	0	123	90	143			
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.7	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130			
Surr: Toluene-d8	9.4		10.00		94.4	70	130			

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		55.1	12.1	85.8			
Surr: Phenol-d5	84		200.0		42.2	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		93.5	26	138			
Surr: Nitrobenzene-d5	71		100.0		71.4	47.5	119			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	48.1	106			
Surr: 4-Terphenyl-d14	90		100.0		89.7	44	113			

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.5	50.3	109			
4-Chloro-3-methylphenol	150	10	200.0	0	74.8	51.2	113			
2-Chlorophenol	140	10	200.0	0	69.9	48.5	104			
1,4-Dichlorobenzene	69	10	100.0	0	68.8	39.5	106			
2,4-Dinitrotoluene	71	10	100.0	0	71.3	45.4	107			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.7	50.4	119			
4-Nitrophenol	160	10	200.0	0	80.4	15.5	62.2			S
Pentachlorophenol	150	20	200.0	0	74.9	23.5	93.5			
Phenol	150	10	200.0	0	73.6	26.8	65.6			S
Pyrene	79	10	100.0	0	79.4	54.4	108			
1,2,4-Trichlorobenzene	68	10	100.0	0	67.8	39.9	106			
Surr: 2-Fluorophenol	140		200.0		71.1	12.1	85.8			
Surr: Phenol-d5	140		200.0		71.9	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	170		200.0		85.2	26	138			
Surr: Nitrobenzene-d5	73		100.0		72.7	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	48.1	106			
Surr: 4-Terphenyl-d14	81		100.0		80.6	44	113			

Sample ID **lcsd-12707** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	66	10	100.0	0	66.3	50.3	109	7.61	27.2	
4-Chloro-3-methylphenol	140	10	200.0	0	70.3	51.2	113	6.31	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	4.01	22.5	
1,4-Dichlorobenzene	67	10	100.0	0	67.2	39.5	106	2.32	24.6	
2,4-Dinitrotoluene	59	10	100.0	0	59.2	45.4	107	18.5	25.3	
N-Nitrosodi-n-propylamine	66	10	100.0	0	66.4	50.4	119	7.62	23.6	
4-Nitrophenol	140	10	200.0	0	67.6	15.5	62.2	17.2	34.7	S
Pentachlorophenol	130	20	200.0	0	63.4	23.5	93.5	16.6	32.8	
Phenol	140	10	200.0	0	70.0	26.8	65.6	5.02	25.5	S
Pyrene	73	10	100.0	0	73.3	54.4	108	7.94	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	65.5	39.9	106	3.39	25.9	
Surr: 2-Fluorophenol	130		200.0		65.5	12.1	85.8	0	0	
Surr: Phenol-d5	130		200.0		67.0	17.7	65.8	0	0	S
Surr: 2,4,6-Tribromophenol	160		200.0		80.2	26	138	0	0	
Surr: Nitrobenzene-d5	65		100.0		64.7	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.9	48.1	106	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.
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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**lcsd-12707**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**LCSS02**	Batch ID:	**12707**	RunNo:	**18041**				
Prep Date:	**4/15/2014**	Analysis Date:	**4/16/2014**	SeqNo:	**520515**	Units:	**µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	75		100.0		75.1	44	113	0	0	

Sample ID	**mb-12756**	SampType:	**MBLK**	TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**PBW**	Batch ID:	**12756**	RunNo:	**18131**				
Prep Date:	**4/17/2014**	Analysis Date:	**4/21/2014**	SeqNo:	**523312**	Units:	**µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12756**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12756**	RunNo: **18131**			
Prep Date: **4/17/2014**	Analysis Date: **4/21/2014**	SeqNo: **523312**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12756** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523312** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	130		200.0		64.2	12.1	85.8			
Surr: Phenol-d5	100		200.0		51.8	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		96.3	26	138			
Surr: Nitrobenzene-d5	95		100.0		95.0	47.5	119			
Surr: 2-Fluorobiphenyl	92		100.0		92.1	48.1	106			
Surr: 4-Terphenyl-d14	88		100.0		88.1	44	113			

Sample ID **lcs-12756** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523313** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	76.6	50.3	109			
4-Chloro-3-methylphenol	170	10	200.0	0	84.9	51.2	113			
2-Chlorophenol	150	10	200.0	0	77.0	48.5	104			
1,4-Dichlorobenzene	70	10	100.0	0	70.2	39.5	106			
2,4-Dinitrotoluene	75	10	100.0	0	74.7	45.4	107			
N-Nitrosodi-n-propylamine	75	10	100.0	0	75.0	50.4	119			
4-Nitrophenol	90	10	200.0	0	44.8	15.5	62.2			
Pentachlorophenol	140	20	200.0	0	70.0	23.5	93.5			
Phenol	86	10	200.0	0	43.0	26.8	65.6			
Pyrene	85	10	100.0	0	85.0	54.4	108			
1,2,4-Trichlorobenzene	83	10	100.0	0	83.4	39.9	106			
Surr: 2-Fluorophenol	120		200.0		62.0	12.1	85.8			
Surr: Phenol-d5	96		200.0		48.0	17.7	65.8			
Surr: 2,4,6-Tribromophenol	200		200.0		97.6	26	138			
Surr: Nitrobenzene-d5	90		100.0		90.1	47.5	119			
Surr: 2-Fluorobiphenyl	92		100.0		92.3	48.1	106			
Surr: 4-Terphenyl-d14	84		100.0		84.5	44	113			

Sample ID **lcsd-12756** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	74	10	100.0	0	73.8	50.3	109	3.72	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	86.2	51.2	113	1.48	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	13.6	22.5	
1,4-Dichlorobenzene	63	10	100.0	0	63.3	39.5	106	10.3	24.6	
2,4-Dinitrotoluene	75	10	100.0	0	75.5	45.4	107	1.07	25.3	

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#: **1404590**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcsd-12756** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12756** RunNo: **18131**
Prep Date: **4/17/2014** Analysis Date: **4/21/2014** SeqNo: **523314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	71	10	100.0	0	71.3	50.4	119	5.03	23.6	
4-Nitrophenol	98	10	200.0	0	48.9	15.5	62.2	8.73	34.7	
Pentachlorophenol	150	20	200.0	0	77.1	23.5	93.5	9.65	32.8	
Phenol	82	10	200.0	0	41.2	26.8	65.6	4.27	25.5	
Pyrene	97	10	100.0	0	97.1	54.4	108	13.4	31.4	
1,2,4-Trichlorobenzene	75	10	100.0	0	74.7	39.9	106	11.0	25.9	
Surr: 2-Fluorophenol	110		200.0		56.8	12.1	85.8	0	0	
Surr: Phenol-d5	80		200.0		40.2	17.7	65.8	0	0	
Surr: 2,4,6-Tribromophenol	180		200.0		90.5	26	138	0	0	
Surr: Nitrobenzene-d5	75		100.0		75.1	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	86		100.0		85.9	48.1	106	0	0	
Surr: 4-Terphenyl-d14	86		100.0		86.0	44	113	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1404590** RcptNo: **1**

Received by/date: AF 04/12/14

Logged By: **Lindsay Mangin** **4/12/2014 8:26:00 AM**

Completed By: **Lindsay Mangin** **4/14/2014 7:45:52 AM**

Reviewed By: CS 04/14/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	2.1	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Phone #: 505-722-0231
email or Fax# CHERYL.JOHNSON@WNR.COM
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time: ☑ Standard ☐ Rush _____
Project Name: HYDROCARBON SEEP
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE 361.438.1668
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.1°C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404590	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
4.11.14	1050	GW	MKTF-11	40 ML VOA 1 L AMBER	5-HCL 2-NEAT	-001			✓							✓	✓					
	1300	GW	MKTF-04			-002			✓							✓	✓					
	1345	GW	MKTF-20			-003			✓							✓	✓					
	—	GW	DUP02			-004			✓							✓	✓					
	1430	GW	MKTF-21			-005			✓							✓	✓					
	1500	GW	MKTF-10			-006			✓							✓	✓					
	1520	GW	FB03			-007			✓							✓	✓					
	1540	GW	EB03			-008			✓							✓	✓					
—	—	W	TRIP BLANK	40 ML VOA	2-HCL	-009										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/12/14	0826	[signature]	[signature]	4/12/14	0826
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 24, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404551

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/11/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 9:00:00 AM
Lab ID: 1404551-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.6	1.0		mg/L	1	4/14/2014 10:33:47 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 10:33:47 PM	12625
Surr: DNOP	93.8	62.7-145		%REC	1	4/14/2014 10:33:47 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Acenaphthylene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Aniline	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Anthracene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Azobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Benzoic acid	ND	20		µg/L	1	4/16/2014 2:07:35 AM	12681
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Carbazole	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Chrysene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Dibenzofuran	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 9:00:00 AM
Lab ID: 1404551-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 2:07:35 AM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 2:07:35 AM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 2:07:35 AM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Fluoranthene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Fluorene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Hexachloroethane	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Isophorone	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2-Methylphenol	ND	20		µg/L	1	4/16/2014 2:07:35 AM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Naphthalene	24	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Nitrobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 2:07:35 AM	12681
Phenanthrene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Phenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Pyrene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Pyridine	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 2:07:35 AM	12681
Surr: 2-Fluorophenol	74.3	12.1-85.8		%REC	1	4/16/2014 2:07:35 AM	12681
Surr: Phenol-d5	55.0	17.7-65.8		%REC	1	4/16/2014 2:07:35 AM	12681
Surr: 2,4,6-Tribromophenol	86.9	26-138		%REC	1	4/16/2014 2:07:35 AM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 9:00:00 AM
Lab ID: 1404551-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	95.7	47.5-119		%REC	1	4/16/2014 2:07:35 AM	12681
Surr: 2-Fluorobiphenyl	95.3	48.1-106		%REC	1	4/16/2014 2:07:35 AM	12681
Surr: 4-Terphenyl-d14	92.7	44-113		%REC	1	4/16/2014 2:07:35 AM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	3500	100		µg/L	100	4/19/2014 12:23:48 AM	R18095
Toluene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Ethylbenzene	580	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Methyl tert-butyl ether (MTBE)	1300	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2,4-Trimethylbenzene	74	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Naphthalene	32	20		µg/L	10	4/15/2014 1:59:18 AM	R17974
1-Methylnaphthalene	ND	40		µg/L	10	4/15/2014 1:59:18 AM	R17974
2-Methylnaphthalene	ND	40		µg/L	10	4/15/2014 1:59:18 AM	R17974
Acetone	ND	100		µg/L	10	4/15/2014 1:59:18 AM	R17974
Bromobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Bromodichloromethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Bromoform	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Bromomethane	ND	30		µg/L	10	4/15/2014 1:59:18 AM	R17974
2-Butanone	ND	100		µg/L	10	4/15/2014 1:59:18 AM	R17974
Carbon disulfide	ND	100		µg/L	10	4/15/2014 1:59:18 AM	R17974
Carbon Tetrachloride	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Chlorobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Chloroethane	ND	20		µg/L	10	4/15/2014 1:59:18 AM	R17974
Chloroform	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Chloromethane	ND	30		µg/L	10	4/15/2014 1:59:18 AM	R17974
2-Chlorotoluene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
4-Chlorotoluene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
cis-1,2-DCE	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/15/2014 1:59:18 AM	R17974
Dibromochloromethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Dibromomethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2-Dichlorobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,3-Dichlorobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,4-Dichlorobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Dichlorodifluoromethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,1-Dichloroethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 9:00:00 AM
Lab ID: 1404551-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
1,1-Dichloroethene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2-Dichloropropane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,3-Dichloropropane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
2,2-Dichloropropane	ND	20		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,1-Dichloropropene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Hexachlorobutadiene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
2-Hexanone	ND	100		µg/L	10	4/15/2014 1:59:18 AM	R17974
Isopropylbenzene	37	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
4-Isopropyltoluene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
4-Methyl-2-pentanone	ND	100		µg/L	10	4/15/2014 1:59:18 AM	R17974
Methylene Chloride	ND	30		µg/L	10	4/15/2014 1:59:18 AM	R17974
n-Butylbenzene	ND	30		µg/L	10	4/15/2014 1:59:18 AM	R17974
n-Propylbenzene	96	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
sec-Butylbenzene	10	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Styrene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
tert-Butylbenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/15/2014 1:59:18 AM	R17974
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
trans-1,2-DCE	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,1,1-Trichloroethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,1,2-Trichloroethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Trichloroethene (TCE)	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Trichlorofluoromethane	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
1,2,3-Trichloropropane	ND	20		µg/L	10	4/15/2014 1:59:18 AM	R17974
Vinyl chloride	ND	10		µg/L	10	4/15/2014 1:59:18 AM	R17974
Xylenes, Total	270	15		µg/L	10	4/15/2014 1:59:18 AM	R17974
Surr: 1,2-Dichloroethane-d4	121	70-130		%REC	10	4/15/2014 1:59:18 AM	R17974
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	10	4/15/2014 1:59:18 AM	R17974
Surr: Dibromofluoromethane	104	70-130		%REC	10	4/15/2014 1:59:18 AM	R17974
Surr: Toluene-d8	103	70-130		%REC	10	4/15/2014 1:59:18 AM	R17974
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	8.6	2.5		mg/L	50	4/16/2014 5:50:10 PM	R18044
Surr: BFB	98.5	70-130		%REC	50	4/16/2014 5:50:10 PM	R18044

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 10:15:00 AM
Lab ID: 1404551-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	17	1.0		mg/L	1	4/14/2014 10:55:44 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 10:55:44 PM	12625
Surr: DNOP	99.0	62.7-145		%REC	1	4/14/2014 10:55:44 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Acenaphthylene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Aniline	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Anthracene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Azobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Benzoic acid	ND	20		µg/L	1	4/16/2014 2:36:45 AM	12681
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Carbazole	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Chrysene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Dibenzofuran	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 10:15:00 AM
Lab ID: 1404551-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 2:36:45 AM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 2:36:45 AM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 2:36:45 AM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Fluoranthene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Fluorene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Hexachloroethane	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Isophorone	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
1-Methylnaphthalene	160	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2-Methylnaphthalene	250	20		µg/L	2	4/16/2014 9:00:28 AM	12681
2-Methylphenol	ND	20		µg/L	1	4/16/2014 2:36:45 AM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Naphthalene	320	20		µg/L	2	4/16/2014 9:00:28 AM	12681
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Nitrobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 2:36:45 AM	12681
Phenanthrene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Phenol	12	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Pyrene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Pyridine	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 2:36:45 AM	12681
Surr: 2-Fluorophenol	75.4	12.1-85.8		%REC	1	4/16/2014 2:36:45 AM	12681
Surr: Phenol-d5	52.6	17.7-65.8		%REC	1	4/16/2014 2:36:45 AM	12681
Surr: 2,4,6-Tribromophenol	89.5	26-138		%REC	1	4/16/2014 2:36:45 AM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 10:15:00 AM
Lab ID: 1404551-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	91.0	47.5-119		%REC	1	4/16/2014 2:36:45 AM	12681
Surr: 2-Fluorobiphenyl	89.6	48.1-106		%REC	1	4/16/2014 2:36:45 AM	12681
Surr: 4-Terphenyl-d14	85.5	44-113		%REC	1	4/16/2014 2:36:45 AM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	1400	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Toluene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Ethylbenzene	680	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Methyl tert-butyl ether (MTBE)	9700	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2,4-Trimethylbenzene	590	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,3,5-Trimethylbenzene	99	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Naphthalene	430	100		µg/L	50	4/15/2014 2:29:31 AM	R17974
1-Methylnaphthalene	ND	200		µg/L	50	4/15/2014 2:29:31 AM	R17974
2-Methylnaphthalene	300	200		µg/L	50	4/15/2014 2:29:31 AM	R17974
Acetone	ND	500		µg/L	50	4/15/2014 2:29:31 AM	R17974
Bromobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Bromodichloromethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Bromoform	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Bromomethane	ND	150		µg/L	50	4/15/2014 2:29:31 AM	R17974
2-Butanone	ND	500		µg/L	50	4/15/2014 2:29:31 AM	R17974
Carbon disulfide	ND	500		µg/L	50	4/15/2014 2:29:31 AM	R17974
Carbon Tetrachloride	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Chlorobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Chloroethane	ND	100		µg/L	50	4/15/2014 2:29:31 AM	R17974
Chloroform	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Chloromethane	ND	150		µg/L	50	4/15/2014 2:29:31 AM	R17974
2-Chlorotoluene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
4-Chlorotoluene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
cis-1,2-DCE	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/15/2014 2:29:31 AM	R17974
Dibromochloromethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Dibromomethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2-Dichlorobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,3-Dichlorobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,4-Dichlorobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Dichlorodifluoromethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,1-Dichloroethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 10:15:00 AM
Lab ID: 1404551-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2-Dichloropropane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,3-Dichloropropane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
2,2-Dichloropropane	ND	100		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,1-Dichloropropene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Hexachlorobutadiene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
2-Hexanone	ND	500		µg/L	50	4/15/2014 2:29:31 AM	R17974
Isopropylbenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
4-Isopropyltoluene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
4-Methyl-2-pentanone	ND	500		µg/L	50	4/15/2014 2:29:31 AM	R17974
Methylene Chloride	ND	150		µg/L	50	4/15/2014 2:29:31 AM	R17974
n-Butylbenzene	ND	150		µg/L	50	4/15/2014 2:29:31 AM	R17974
n-Propylbenzene	86	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
sec-Butylbenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Styrene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
tert-Butylbenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/15/2014 2:29:31 AM	R17974
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
trans-1,2-DCE	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,1,1-Trichloroethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,1,2-Trichloroethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Trichloroethene (TCE)	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Trichlorofluoromethane	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
1,2,3-Trichloropropane	ND	100		µg/L	50	4/15/2014 2:29:31 AM	R17974
Vinyl chloride	ND	50		µg/L	50	4/15/2014 2:29:31 AM	R17974
Xylenes, Total	610	75		µg/L	50	4/15/2014 2:29:31 AM	R17974
Surr: 1,2-Dichloroethane-d4	117	70-130		%REC	50	4/15/2014 2:29:31 AM	R17974
Surr: 4-Bromofluorobenzene	89.5	70-130		%REC	50	4/15/2014 2:29:31 AM	R17974
Surr: Dibromofluoromethane	107	70-130		%REC	50	4/15/2014 2:29:31 AM	R17974
Surr: Toluene-d8	104	70-130		%REC	50	4/15/2014 2:29:31 AM	R17974
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	18	2.5		mg/L	50	4/16/2014 6:18:51 PM	R18044
Surr: BFB	99.0	70-130		%REC	50	4/16/2014 6:18:51 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 11:15:00 AM
Lab ID: 1404551-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 11:17:40 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 11:17:40 PM	12625
Surr: DNOP	98.6	62.7-145		%REC	1	4/14/2014 11:17:40 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 2:52:31 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 11:15:00 AM
Lab ID: 1404551-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 2:52:31 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 2:52:31 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 2:52:31 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2-Methylphenol	ND	25		µg/L	1	4/16/2014 2:52:31 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Naphthalene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 2:52:31 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 2:52:31 PM	12707
Surr: 2-Fluorophenol	74.5	12.1-85.8		%REC	1	4/16/2014 2:52:31 PM	12707
Surr: Phenol-d5	57.0	17.7-65.8		%REC	1	4/16/2014 2:52:31 PM	12707
Surr: 2,4,6-Tribromophenol	93.8	26-138		%REC	1	4/16/2014 2:52:31 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 11:15:00 AM
Lab ID: 1404551-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	91.9	47.5-119		%REC	1	4/16/2014 2:52:31 PM	12707
Surr: 2-Fluorobiphenyl	85.3	48.1-106		%REC	1	4/16/2014 2:52:31 PM	12707
Surr: 4-Terphenyl-d14	84.2	44-113		%REC	1	4/16/2014 2:52:31 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Toluene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Ethylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Naphthalene	ND	4.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1-Methylnaphthalene	ND	8.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
2-Methylnaphthalene	ND	8.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Acetone	ND	20		µg/L	2	4/15/2014 3:29:46 AM	R17974
Bromobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Bromodichloromethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Bromoform	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Bromomethane	ND	6.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
2-Butanone	ND	20		µg/L	2	4/15/2014 3:29:46 AM	R17974
Carbon disulfide	ND	20		µg/L	2	4/15/2014 3:29:46 AM	R17974
Carbon Tetrachloride	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Chlorobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Chloroethane	ND	4.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Chloroform	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Chloromethane	ND	6.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
2-Chlorotoluene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
4-Chlorotoluene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
cis-1,2-DCE	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Dibromochloromethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Dibromomethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2-Dichlorobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,3-Dichlorobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,4-Dichlorobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Dichlorodifluoromethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,1-Dichloroethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 11:15:00 AM
Lab ID: 1404551-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	2.8	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2-Dichloropropane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,3-Dichloropropane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
2,2-Dichloropropane	ND	4.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,1-Dichloropropene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Hexachlorobutadiene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
2-Hexanone	ND	20		µg/L	2	4/15/2014 3:29:46 AM	R17974
Isopropylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
4-Isopropyltoluene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
4-Methyl-2-pentanone	ND	20		µg/L	2	4/15/2014 3:29:46 AM	R17974
Methylene Chloride	ND	6.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
n-Butylbenzene	ND	6.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
n-Propylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
sec-Butylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Styrene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
tert-Butylbenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
trans-1,2-DCE	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,1,1-Trichloroethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,1,2-Trichloroethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Trichloroethene (TCE)	2.9	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Trichlorofluoromethane	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
1,2,3-Trichloropropane	ND	4.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Vinyl chloride	ND	2.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Xylenes, Total	ND	3.0		µg/L	2	4/15/2014 3:29:46 AM	R17974
Surr: 1,2-Dichloroethane-d4	109	70-130		%REC	2	4/15/2014 3:29:46 AM	R17974
Surr: 4-Bromofluorobenzene	87.6	70-130		%REC	2	4/15/2014 3:29:46 AM	R17974
Surr: Dibromofluoromethane	102	70-130		%REC	2	4/15/2014 3:29:46 AM	R17974
Surr: Toluene-d8	104	70-130		%REC	2	4/15/2014 3:29:46 AM	R17974
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/16/2014 6:47:43 PM	R18044
Surr: BFB	96.4	70-130		%REC	1	4/16/2014 6:47:43 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FBO1
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:35:00 PM
Lab ID: 1404551-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 11:39:38 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 11:39:38 PM	12625
Surr: DNOP	97.8	62.7-145		%REC	1	4/14/2014 11:39:38 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 3:22:28 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FBO1
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:35:00 PM
Lab ID: 1404551-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 3:22:28 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 3:22:28 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 3:22:28 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 3:22:28 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Naphthalene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 3:22:28 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 3:22:28 PM	12707
Surr: 2-Fluorophenol	51.9	12.1-85.8		%REC	1	4/16/2014 3:22:28 PM	12707
Surr: Phenol-d5	34.0	17.7-65.8		%REC	1	4/16/2014 3:22:28 PM	12707
Surr: 2,4,6-Tribromophenol	69.6	26-138		%REC	1	4/16/2014 3:22:28 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FBO1
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:35:00 PM
Lab ID: 1404551-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	78.7	47.5-119		%REC	1	4/16/2014 3:22:28 PM	12707
Surr: 2-Fluorobiphenyl	74.4	48.1-106		%REC	1	4/16/2014 3:22:28 PM	12707
Surr: 4-Terphenyl-d14	59.6	44-113		%REC	1	4/16/2014 3:22:28 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Toluene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Ethylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Naphthalene	ND	2.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
2-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Acetone	ND	10		µg/L	1	4/15/2014 3:59:53 AM	R17974
Bromobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Bromodichloromethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Bromoform	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Bromomethane	ND	3.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
2-Butanone	ND	10		µg/L	1	4/15/2014 3:59:53 AM	R17974
Carbon disulfide	ND	10		µg/L	1	4/15/2014 3:59:53 AM	R17974
Carbon Tetrachloride	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Chlorobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Chloroethane	ND	2.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Chloroform	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Chloromethane	ND	3.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
2-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
4-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
cis-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Dibromochloromethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Dibromomethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,1-Dichloroethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FBO1
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:35:00 PM
Lab ID: 1404551-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
1,1-Dichloroethene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,3-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
2,2-Dichloropropane	ND	2.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,1-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Hexachlorobutadiene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
2-Hexanone	ND	10		µg/L	1	4/15/2014 3:59:53 AM	R17974
Isopropylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
4-Isopropyltoluene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
4-Methyl-2-pentanone	ND	10		µg/L	1	4/15/2014 3:59:53 AM	R17974
Methylene Chloride	ND	3.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
n-Butylbenzene	ND	3.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
n-Propylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
sec-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Styrene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
tert-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
trans-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Trichlorofluoromethane	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Vinyl chloride	ND	1.0		µg/L	1	4/15/2014 3:59:53 AM	R17974
Xylenes, Total	ND	1.5		µg/L	1	4/15/2014 3:59:53 AM	R17974
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	4/15/2014 3:59:53 AM	R17974
Surr: 4-Bromofluorobenzene	84.2	70-130		%REC	1	4/15/2014 3:59:53 AM	R17974
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/15/2014 3:59:53 AM	R17974
Surr: Toluene-d8	104	70-130		%REC	1	4/15/2014 3:59:53 AM	R17974
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/16/2014 7:16:32 PM	R18044
Surr: BFB	96.8	70-130		%REC	1	4/16/2014 7:16:32 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP01
Project: Hydrocarbon Seep
Collection Date: 4/9/2014
Lab ID: 1404551-005
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	13	1.0		mg/L	1	4/15/2014 12:01:31 AM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 12:01:31 AM	12625
Surr: DNOP	104	62.7-145		%REC	1	4/15/2014 12:01:31 AM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Acenaphthylene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Aniline	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Anthracene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Azobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Benzoic acid	ND	20		µg/L	1	4/16/2014 3:52:14 PM	12707
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Carbazole	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Chrysene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Dibenzofuran	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP01
Project: Hydrocarbon Seep
Collection Date: 4/9/2014
Lab ID: 1404551-005
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 3:52:14 PM	12707
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 3:52:14 PM	12707
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 3:52:14 PM	12707
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Fluoranthene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Fluorene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Hexachloroethane	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Isophorone	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
1-Methylnaphthalene	110	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2-Methylnaphthalene	180	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2-Methylphenol	ND	20		µg/L	1	4/16/2014 3:52:14 PM	12707
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Naphthalene	210	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Nitrobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 3:52:14 PM	12707
Phenanthrene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Phenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Pyrene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Pyridine	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 3:52:14 PM	12707
Surr: 2-Fluorophenol	40.6	12.1-85.8		%REC	1	4/16/2014 3:52:14 PM	12707
Surr: Phenol-d5	31.2	17.7-65.8		%REC	1	4/16/2014 3:52:14 PM	12707
Surr: 2,4,6-Tribromophenol	69.2	26-138		%REC	1	4/16/2014 3:52:14 PM	12707

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP01
Project: Hydrocarbon Seep
Collection Date: 4/9/2014
Lab ID: 1404551-005
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	60.3	47.5-119		%REC	1	4/16/2014 3:52:14 PM	12707
Surr: 2-Fluorobiphenyl	63.7	48.1-106		%REC	1	4/16/2014 3:52:14 PM	12707
Surr: 4-Terphenyl-d14	70.5	44-113		%REC	1	4/16/2014 3:52:14 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	1500	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Toluene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Ethylbenzene	740	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Methyl tert-butyl ether (MTBE)	11000	100		µg/L	100	4/19/2014 12:53:48 AM	R18095
1,2,4-Trimethylbenzene	620	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,3,5-Trimethylbenzene	110	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Naphthalene	440	100		µg/L	50	4/15/2014 4:30:01 AM	R17974
1-Methylnaphthalene	ND	200		µg/L	50	4/15/2014 4:30:01 AM	R17974
2-Methylnaphthalene	320	200		µg/L	50	4/15/2014 4:30:01 AM	R17974
Acetone	ND	500		µg/L	50	4/15/2014 4:30:01 AM	R17974
Bromobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Bromodichloromethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Bromoform	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Bromomethane	ND	150		µg/L	50	4/15/2014 4:30:01 AM	R17974
2-Butanone	ND	500		µg/L	50	4/15/2014 4:30:01 AM	R17974
Carbon disulfide	ND	500		µg/L	50	4/15/2014 4:30:01 AM	R17974
Carbon Tetrachloride	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Chlorobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Chloroethane	ND	100		µg/L	50	4/15/2014 4:30:01 AM	R17974
Chloroform	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Chloromethane	ND	150		µg/L	50	4/15/2014 4:30:01 AM	R17974
2-Chlorotoluene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
4-Chlorotoluene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
cis-1,2-DCE	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/15/2014 4:30:01 AM	R17974
Dibromochloromethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Dibromomethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2-Dichlorobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,3-Dichlorobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,4-Dichlorobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Dichlorodifluoromethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,1-Dichloroethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: DUP01
Project: Hydrocarbon Seep
Collection Date: 4/9/2014
Lab ID: 1404551-005
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2-Dichloropropane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,3-Dichloropropane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
2,2-Dichloropropane	ND	100		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,1-Dichloropropene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Hexachlorobutadiene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
2-Hexanone	ND	500		µg/L	50	4/15/2014 4:30:01 AM	R17974
Isopropylbenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
4-Isopropyltoluene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
4-Methyl-2-pentanone	ND	500		µg/L	50	4/15/2014 4:30:01 AM	R17974
Methylene Chloride	ND	150		µg/L	50	4/15/2014 4:30:01 AM	R17974
n-Butylbenzene	ND	150		µg/L	50	4/15/2014 4:30:01 AM	R17974
n-Propylbenzene	84	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
sec-Butylbenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Styrene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
tert-Butylbenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/15/2014 4:30:01 AM	R17974
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
trans-1,2-DCE	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,1,1-Trichloroethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,1,2-Trichloroethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Trichloroethene (TCE)	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Trichlorofluoromethane	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
1,2,3-Trichloropropane	ND	100		µg/L	50	4/15/2014 4:30:01 AM	R17974
Vinyl chloride	ND	50		µg/L	50	4/15/2014 4:30:01 AM	R17974
Xylenes, Total	670	75		µg/L	50	4/15/2014 4:30:01 AM	R17974
Surr: 1,2-Dichloroethane-d4	111	70-130		%REC	50	4/15/2014 4:30:01 AM	R17974
Surr: 4-Bromofluorobenzene	82.3	70-130		%REC	50	4/15/2014 4:30:01 AM	R17974
Surr: Dibromofluoromethane	100	70-130		%REC	50	4/15/2014 4:30:01 AM	R17974
Surr: Toluene-d8	105	70-130		%REC	50	4/15/2014 4:30:01 AM	R17974
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	18	2.5		mg/L	50	4/16/2014 7:45:09 PM	R18044
Surr: BFB	96.1	70-130		%REC	50	4/16/2014 7:45:09 PM	R18044

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404551-006
Matrix: TRIP BLANK
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Toluene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Ethylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Naphthalene	ND	2.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
2-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Acetone	ND	10		µg/L	1	4/15/2014 5:30:08 AM	R17974
Bromobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Bromodichloromethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Bromoform	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Bromomethane	ND	3.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
2-Butanone	ND	10		µg/L	1	4/15/2014 5:30:08 AM	R17974
Carbon disulfide	ND	10		µg/L	1	4/15/2014 5:30:08 AM	R17974
Carbon Tetrachloride	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Chlorobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Chloroethane	ND	2.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Chloroform	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Chloromethane	ND	3.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
2-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
4-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
cis-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Dibromochloromethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Dibromomethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,1-Dichloroethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,1-Dichloroethene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,3-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
2,2-Dichloropropane	ND	2.0		µg/L	1	4/15/2014 5:30:08 AM	R17974

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

Qualifiers:

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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404551-006
Matrix: TRIP BLANK
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Hexachlorobutadiene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
2-Hexanone	ND	10		µg/L	1	4/15/2014 5:30:08 AM	R17974
Isopropylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
4-Isopropyltoluene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
4-Methyl-2-pentanone	ND	10		µg/L	1	4/15/2014 5:30:08 AM	R17974
Methylene Chloride	ND	3.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
n-Butylbenzene	ND	3.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
n-Propylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
sec-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Styrene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
tert-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
trans-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Trichlorofluoromethane	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Vinyl chloride	ND	1.0		µg/L	1	4/15/2014 5:30:08 AM	R17974
Xylenes, Total	ND	1.5		µg/L	1	4/15/2014 5:30:08 AM	R17974
Surr: 1,2-Dichloroethane-d4	111	70-130		%REC	1	4/15/2014 5:30:08 AM	R17974
Surr: 4-Bromofluorobenzene	87.0	70-130		%REC	1	4/15/2014 5:30:08 AM	R17974
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/15/2014 5:30:08 AM	R17974
Surr: Toluene-d8	104	70-130		%REC	1	4/15/2014 5:30:08 AM	R17974

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12625** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518822** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	62.7	145			

Sample ID **LCS-12625** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518851** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	107	78.6	146			
Surr: DNOP	0.49		0.5000		98.9	62.7	145			

Sample ID **LCSD-12625** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	113	78.6	146	5.22	26.5	
Surr: DNOP	0.52		0.5000		104	62.7	145	0	0	

Qualifiers:

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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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5m rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R17974**	RunNo: **17974**			
Prep Date:	Analysis Date: **4/14/2014**	SeqNo: **518627**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5m rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17974**	RunNo: **17974**
Prep Date:	Analysis Date: **4/14/2014**	SeqNo: **518627** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		119	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.9	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17974**	RunNo: **17974**
Prep Date:	Analysis Date: **4/14/2014**	SeqNo: **518629** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	92.6	70	130			

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R17974** RunNo: **17974**
Prep Date: Analysis Date: **4/14/2014** SeqNo: **518629** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	118	90	143			
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.4	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.9	70	130			
Surr: Toluene-d8	9.8		10.00		98.4	70	130			

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18016** RunNo: **18016**
Prep Date: Analysis Date: **4/15/2014** SeqNo: **519912** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		88.2	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18016** RunNo: **18016**
Prep Date: Analysis Date: **4/15/2014** SeqNo: **519914** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.8	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.3	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18044** RunNo: **18044**
Prep Date: Analysis Date: **4/16/2014** SeqNo: **520592** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18044** RunNo: **18044**
Prep Date: Analysis Date: **4/16/2014** SeqNo: **520614** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		99.9	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18095** RunNo: **18095**
Prep Date: Analysis Date: **4/18/2014** SeqNo: **522409** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.1	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Sample ID **100nglcs,200ngann** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18095** RunNo: **18095**
Prep Date: Analysis Date: **4/18/2014** SeqNo: **522411** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	6.2		10.00		61.7	70	130			S
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.6	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		56.2	12.1	85.8			
Surr: Phenol-d5	120		200.0		59.6	17.7	65.8			
Surr: 2,4,6-Tribromophenol	110		200.0		57.1	26	138			
Surr: Nitrobenzene-d5	58		100.0		58.4	47.5	119			
Surr: 2-Fluorobiphenyl	63		100.0		62.6	48.1	106			
Surr: 4-Terphenyl-d14	63		100.0		63.1	44	113			

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12681** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12681** RunNo: **17998**
Prep Date: **4/12/2014** Analysis Date: **4/15/2014** SeqNo: **519466** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	60	10	100.0	0	60.4	50.3	109			
4-Chloro-3-methylphenol	130	10	200.0	0	63.4	51.2	113			
2-Chlorophenol	130	10	200.0	0	63.6	48.5	104			
1,4-Dichlorobenzene	66	10	100.0	0	65.9	39.5	106			
2,4-Dinitrotoluene	51	10	100.0	0	50.8	45.4	107			
N-Nitrosodi-n-propylamine	61	10	100.0	0	61.1	50.4	119			
4-Nitrophenol	110	10	200.0	0	54.7	15.5	62.2			
Pentachlorophenol	100	20	200.0	0	51.0	23.5	93.5			
Phenol	130	10	200.0	0	63.6	26.8	65.6			
Pyrene	73	10	100.0	0	73.0	54.4	108			
1,2,4-Trichlorobenzene	63	10	100.0	0	63.2	39.9	106			
Surr: 2-Fluorophenol	130		200.0		63.2	12.1	85.8			
Surr: Phenol-d5	130		200.0		66.8	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	150		200.0		73.0	26	138			
Surr: Nitrobenzene-d5	68		100.0		67.6	47.5	119			
Surr: 2-Fluorobiphenyl	69		100.0		69.5	48.1	106			
Surr: 4-Terphenyl-d14	78		100.0		77.5	44	113			

Sample ID **mb-12707** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		55.1	12.1	85.8			
Surr: Phenol-d5	84		200.0		42.2	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		93.5	26	138			
Surr: Nitrobenzene-d5	71		100.0		71.4	47.5	119			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	48.1	106			
Surr: 4-Terphenyl-d14	90		100.0		89.7	44	113			

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.5	50.3	109			
4-Chloro-3-methylphenol	150	10	200.0	0	74.8	51.2	113			
2-Chlorophenol	140	10	200.0	0	69.9	48.5	104			
1,4-Dichlorobenzene	69	10	100.0	0	68.8	39.5	106			
2,4-Dinitrotoluene	71	10	100.0	0	71.3	45.4	107			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.7	50.4	119			
4-Nitrophenol	160	10	200.0	0	80.4	15.5	62.2			S
Pentachlorophenol	150	20	200.0	0	74.9	23.5	93.5			
Phenol	150	10	200.0	0	73.6	26.8	65.6			S
Pyrene	79	10	100.0	0	79.4	54.4	108			
1,2,4-Trichlorobenzene	68	10	100.0	0	67.8	39.9	106			

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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	140		200.0		71.1	12.1	85.8			
Surr: Phenol-d5	140		200.0		71.9	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	170		200.0		85.2	26	138			
Surr: Nitrobenzene-d5	73		100.0		72.7	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	48.1	106			
Surr: 4-Terphenyl-d14	81		100.0		80.6	44	113			

Sample ID **lcsd-12707** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	66	10	100.0	0	66.3	50.3	109	7.61	27.2	
4-Chloro-3-methylphenol	140	10	200.0	0	70.3	51.2	113	6.31	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	4.01	22.5	
1,4-Dichlorobenzene	67	10	100.0	0	67.2	39.5	106	2.32	24.6	
2,4-Dinitrotoluene	59	10	100.0	0	59.2	45.4	107	18.5	25.3	
N-Nitrosodi-n-propylamine	66	10	100.0	0	66.4	50.4	119	7.62	23.6	
4-Nitrophenol	140	10	200.0	0	67.6	15.5	62.2	17.2	34.7	S
Pentachlorophenol	130	20	200.0	0	63.4	23.5	93.5	16.6	32.8	
Phenol	140	10	200.0	0	70.0	26.8	65.6	5.02	25.5	S
Pyrene	73	10	100.0	0	73.3	54.4	108	7.94	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	65.5	39.9	106	3.39	25.9	
Surr: 2-Fluorophenol	130		200.0		65.5	12.1	85.8	0	0	
Surr: Phenol-d5	130		200.0		67.0	17.7	65.8	0	0	S
Surr: 2,4,6-Tribromophenol	160		200.0		80.2	26	138	0	0	
Surr: Nitrobenzene-d5	65		100.0		64.7	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.9	48.1	106	0	0	
Surr: 4-Terphenyl-d14	75		100.0		75.1	44	113	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.
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#: **1404551**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**5mL rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520568** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		96.0	70	130			

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	85.2	80	120			
Surr: BFB	9.9		10.00		98.7	70	130			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1404551 RcptNo: 1

Received by/date: Mg 04/11/14

Logged By: **Michelle Garcia** 4/11/2014 9:30:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 4/11/2014 11:19:26 AM Michelle Garcia

Reviewed By: AT 04/11/14

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? 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Phone #: 505-722-0231
email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation ☐ NELAP ☐ Other ____
☐ EDD (Type) ____

Turn-Around Time: ☑ Standard ☐ Rush ____
Project Name: HYDROCARBON SEEP
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE 361.438.1668
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404551	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
4.9.14	0900	GW	MKTF-17	6, 40 mL VOA 1 L AMBER	HCL / NEAT	-001			✓							✓	✓					
	1015	GW	MKTF-19			-002			✓							✓	✓					
	1115	GW	MKTF-34			-003			✓							✓	✓					
	1235	~~GW~~ W	FB01			-004			✓							✓	✓					
	—	GW	DUP01			-005			✓							✓	✓					
	—	W	TRIP BLANK	2, 40 mL VOA	HCL	-006										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4.10.14	707	[signature]	[signature]	04/11/14	0930
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 24, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404550

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/11/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB02
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:50:00 PM
Lab ID: 1404550-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 1:28:48 AM	12674
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 1:28:48 AM	12674
Surr: DNOP	96.6	62.7-145		%REC	1	4/15/2014 1:28:48 AM	12674
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Acenaphthylene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Aniline	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Anthracene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Azobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Benzoic acid	ND	20		µg/L	1	4/16/2014 12:11:07 AM	12681
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Carbazole	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Chrysene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Dibenzofuran	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB02
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:50:00 PM
Lab ID: 1404550-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 12:11:07 AM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 12:11:07 AM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 12:11:07 AM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Fluoranthene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Fluorene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Hexachloroethane	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Isophorone	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2-Methylphenol	ND	20		µg/L	1	4/16/2014 12:11:07 AM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Naphthalene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Nitrobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 12:11:07 AM	12681
Phenanthrene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Phenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Pyrene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Pyridine	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 12:11:07 AM	12681
Surr: 2-Fluorophenol	65.9	12.1-85.8		%REC	1	4/16/2014 12:11:07 AM	12681
Surr: Phenol-d5	49.3	17.7-65.8		%REC	1	4/16/2014 12:11:07 AM	12681
Surr: 2,4,6-Tribromophenol	82.4	26-138		%REC	1	4/16/2014 12:11:07 AM	12681

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB02
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:50:00 PM
Lab ID: 1404550-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	84.6	47.5-119		%REC	1	4/16/2014 12:11:07 AM	12681
Surr: 2-Fluorobiphenyl	90.2	48.1-106		%REC	1	4/16/2014 12:11:07 AM	12681
Surr: 4-Terphenyl-d14	86.5	44-113		%REC	1	4/16/2014 12:11:07 AM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Toluene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Ethylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Naphthalene	ND	2.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
2-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Acetone	ND	10		µg/L	1	4/15/2014 9:42:31 PM	R18006
Bromobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Bromodichloromethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Bromoform	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Bromomethane	ND	3.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
2-Butanone	ND	10		µg/L	1	4/15/2014 9:42:31 PM	R18006
Carbon disulfide	ND	10		µg/L	1	4/15/2014 9:42:31 PM	R18006
Carbon Tetrachloride	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Chlorobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Chloroethane	ND	2.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Chloroform	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Chloromethane	ND	3.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
2-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
4-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
cis-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Dibromochloromethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Dibromomethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,1-Dichloroethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB02
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 12:50:00 PM
Lab ID: 1404550-001
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
1,1-Dichloroethene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,3-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
2,2-Dichloropropane	ND	2.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,1-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Hexachlorobutadiene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
2-Hexanone	ND	10		µg/L	1	4/15/2014 9:42:31 PM	R18006
Isopropylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
4-Isopropyltoluene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
4-Methyl-2-pentanone	ND	10		µg/L	1	4/15/2014 9:42:31 PM	R18006
Methylene Chloride	ND	3.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
n-Butylbenzene	ND	3.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
n-Propylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
sec-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Styrene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
tert-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
trans-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Trichlorofluoromethane	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Vinyl chloride	ND	1.0		µg/L	1	4/15/2014 9:42:31 PM	R18006
Xylenes, Total	ND	1.5		µg/L	1	4/15/2014 9:42:31 PM	R18006
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	4/15/2014 9:42:31 PM	R18006
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	1	4/15/2014 9:42:31 PM	R18006
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/15/2014 9:42:31 PM	R18006
Surr: Toluene-d8	94.6	70-130		%REC	1	4/15/2014 9:42:31 PM	R18006
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/16/2014 8:13:56 PM	R18044
Surr: BFB	97.7	70-130		%REC	1	4/16/2014 8:13:56 PM	R18044

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 1:00:00 PM
Lab ID: 1404550-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 1:50:40 AM	12674
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 1:50:40 AM	12674
Surr: DNOP	109	62.7-145		%REC	1	4/15/2014 1:50:40 AM	12674
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Acenaphthylene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Aniline	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Anthracene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Azobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Benzoic acid	ND	20		µg/L	1	4/16/2014 12:40:15 AM	12681
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Carbazole	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Chrysene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Dibenzofuran	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681

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Qualifiers:

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 1:00:00 PM
Lab ID: 1404550-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 12:40:15 AM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 12:40:15 AM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 12:40:15 AM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Fluoranthene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Fluorene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Hexachloroethane	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Isophorone	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2-Methylphenol	ND	20		µg/L	1	4/16/2014 12:40:15 AM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Naphthalene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Nitrobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 12:40:15 AM	12681
Phenanthrene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Phenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Pyrene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Pyridine	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 12:40:15 AM	12681
Surr: 2-Fluorophenol	61.1	12.1-85.8		%REC	1	4/16/2014 12:40:15 AM	12681
Surr: Phenol-d5	46.4	17.7-65.8		%REC	1	4/16/2014 12:40:15 AM	12681
Surr: 2,4,6-Tribromophenol	81.9	26-138		%REC	1	4/16/2014 12:40:15 AM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 1:00:00 PM
Lab ID: 1404550-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	85.5	47.5-119		%REC	1	4/16/2014 12:40:15 AM	12681
Surr: 2-Fluorobiphenyl	87.1	48.1-106		%REC	1	4/16/2014 12:40:15 AM	12681
Surr: 4-Terphenyl-d14	80.5	44-113		%REC	1	4/16/2014 12:40:15 AM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Toluene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Ethylbenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Methyl tert-butyl ether (MTBE)	150	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2-Dichloroethane (EDC)	30	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Naphthalene	ND	2.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
2-Methylnaphthalene	ND	4.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Acetone	ND	10		µg/L	1	4/15/2014 11:37:20 PM	R18006
Bromobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Bromodichloromethane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Bromoform	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Bromomethane	ND	3.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
2-Butanone	ND	10		µg/L	1	4/15/2014 11:37:20 PM	R18006
Carbon disulfide	ND	10		µg/L	1	4/15/2014 11:37:20 PM	R18006
Carbon Tetrachloride	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Chlorobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Chloroethane	ND	2.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Chloroform	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Chloromethane	ND	3.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
2-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
4-Chlorotoluene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
cis-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Dibromochloromethane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Dibromomethane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,1-Dichloroethane	22	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 1:00:00 PM
Lab ID: 1404550-002
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
1,1-Dichloroethene	36	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,3-Dichloropropane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
2,2-Dichloropropane	ND	2.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,1-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Hexachlorobutadiene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
2-Hexanone	ND	10		µg/L	1	4/15/2014 11:37:20 PM	R18006
Isopropylbenzene	2.5	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
4-Isopropyltoluene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
4-Methyl-2-pentanone	ND	10		µg/L	1	4/15/2014 11:37:20 PM	R18006
Methylene Chloride	ND	3.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
n-Butylbenzene	ND	3.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
n-Propylbenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
sec-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Styrene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
tert-Butylbenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
trans-1,2-DCE	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,1,1-Trichloroethane	1.5	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,1,2-Trichloroethane	2.3	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Trichlorofluoromethane	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Vinyl chloride	ND	1.0		µg/L	1	4/15/2014 11:37:20 PM	R18006
Xylenes, Total	ND	1.5		µg/L	1	4/15/2014 11:37:20 PM	R18006
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/15/2014 11:37:20 PM	R18006
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	4/15/2014 11:37:20 PM	R18006
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/15/2014 11:37:20 PM	R18006
Surr: Toluene-d8	91.5	70-130		%REC	1	4/15/2014 11:37:20 PM	R18006
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	0.22	0.050		mg/L	1	4/16/2014 9:40:20 PM	R18044
Surr: BFB	97.8	70-130		%REC	1	4/16/2014 9:40:20 PM	R18044

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 2:30:00 PM
Lab ID: 1404550-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 2:12:33 AM	12674
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 2:12:33 AM	12674
Surr: DNOP	107	62.7-145		%REC	1	4/15/2014 2:12:33 AM	12674
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Acenaphthylene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Aniline	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Anthracene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Azobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Benz(a)anthracene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Benzo(a)pyrene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Benzo(b)fluoranthene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Benzo(g,h,i)perylene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Benzo(k)fluoranthene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Benzoic acid	ND	21		µg/L	1	4/16/2014 2:22:42 PM	12707
Benzyl alcohol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Bis(2-chloroethoxy)methane	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Bis(2-chloroethyl)ether	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Bis(2-chloroisopropyl)ether	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Bis(2-ethylhexyl)phthalate	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4-Bromophenyl phenyl ether	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Butyl benzyl phthalate	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Carbazole	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4-Chloro-3-methylphenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4-Chloroaniline	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2-Chloronaphthalene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2-Chlorophenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4-Chlorophenyl phenyl ether	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Chrysene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Di-n-butyl phthalate	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Di-n-octyl phthalate	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Dibenz(a,h)anthracene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Dibenzofuran	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
1,2-Dichlorobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
1,3-Dichlorobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
1,4-Dichlorobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
3,3´-Dichlorobenzidine	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Diethyl phthalate	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Dimethyl phthalate	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 2:30:00 PM
Lab ID: 1404550-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	21		µg/L	1	4/16/2014 2:22:42 PM	12707
2,4-Dimethylphenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4,6-Dinitro-2-methylphenol	ND	21		µg/L	1	4/16/2014 2:22:42 PM	12707
2,4-Dinitrophenol	ND	21		µg/L	1	4/16/2014 2:22:42 PM	12707
2,4-Dinitrotoluene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2,6-Dinitrotoluene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Fluoranthene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Fluorene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Hexachlorobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Hexachlorobutadiene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Hexachlorocyclopentadiene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Hexachloroethane	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Indeno(1,2,3-cd)pyrene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Isophorone	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
1-Methylnaphthalene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2-Methylnaphthalene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2-Methylphenol	ND	21		µg/L	1	4/16/2014 2:22:42 PM	12707
3+4-Methylphenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
N-Nitrosodi-n-propylamine	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
N-Nitrosodimethylamine	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
N-Nitrosodiphenylamine	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Naphthalene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2-Nitroaniline	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
3-Nitroaniline	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4-Nitroaniline	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Nitrobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2-Nitrophenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
4-Nitrophenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Pentachlorophenol	ND	21		µg/L	1	4/16/2014 2:22:42 PM	12707
Phenanthrene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Phenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Pyrene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Pyridine	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
1,2,4-Trichlorobenzene	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2,4,5-Trichlorophenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
2,4,6-Trichlorophenol	ND	11		µg/L	1	4/16/2014 2:22:42 PM	12707
Surr: 2-Fluorophenol	21.0	12.1-85.8		%REC	1	4/16/2014 2:22:42 PM	12707
Surr: Phenol-d5	28.8	17.7-65.8		%REC	1	4/16/2014 2:22:42 PM	12707
Surr: 2,4,6-Tribromophenol	32.9	26-138		%REC	1	4/16/2014 2:22:42 PM	12707

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Collection Date: 4/9/2014 2:30:00 PM
Lab ID: 1404550-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	80.0	47.5-119		%REC	1	4/16/2014 2:22:42 PM	12707
Surr: 2-Fluorobiphenyl	80.8	48.1-106		%REC	1	4/16/2014 2:22:42 PM	12707
Surr: 4-Terphenyl-d14	79.6	44-113		%REC	1	4/16/2014 2:22:42 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Toluene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Ethylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Methyl tert-butyl ether (MTBE)	21	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Naphthalene	ND	2.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Acetone	ND	10		µg/L	1	4/16/2014 8:42:50 PM	R18044
Bromobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Bromoform	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Bromomethane	ND	3.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
2-Butanone	ND	10		µg/L	1	4/16/2014 8:42:50 PM	R18044
Carbon disulfide	ND	10		µg/L	1	4/16/2014 8:42:50 PM	R18044
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Chlorobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Chloroethane	ND	2.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Chloroform	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Chloromethane	ND	3.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Dibromomethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,1-Dichloroethane	25	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 2:30:00 PM
Lab ID: 1404550-003
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
2-Hexanone	ND	10		µg/L	1	4/16/2014 8:42:50 PM	R18044
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2014 8:42:50 PM	R18044
Methylene Chloride	ND	3.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
n-Butylbenzene	ND	3.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Styrene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Trichloroethene (TCE)	1.4	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Vinyl chloride	ND	1.0		µg/L	1	4/16/2014 8:42:50 PM	R18044
Xylenes, Total	ND	1.5		µg/L	1	4/16/2014 8:42:50 PM	R18044
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/16/2014 8:42:50 PM	R18044
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	4/16/2014 8:42:50 PM	R18044
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/16/2014 8:42:50 PM	R18044
Surr: Toluene-d8	90.5	70-130		%REC	1	4/16/2014 8:42:50 PM	R18044
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/16/2014 8:42:50 PM	R18044
Surr: BFB	95.2	70-130		%REC	1	4/16/2014 8:42:50 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 3:40:00 PM
Lab ID: 1404550-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/15/2014 2:34:38 AM	12674
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/15/2014 2:34:38 AM	12674
Surr: DNOP	101	62.7-145		%REC	1	4/15/2014 2:34:38 AM	12674
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Acenaphthylene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Aniline	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Anthracene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Azobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Benzoic acid	ND	20		µg/L	1	4/16/2014 1:38:42 AM	12681
Benzyl alcohol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Carbazole	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4-Chloroaniline	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2-Chlorophenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Chrysene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Dibenzofuran	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Diethyl phthalate	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 3:40:00 PM
Lab ID: 1404550-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/16/2014 1:38:42 AM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/16/2014 1:38:42 AM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/16/2014 1:38:42 AM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Fluoranthene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Fluorene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Hexachloroethane	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Isophorone	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2-Methylphenol	ND	20		µg/L	1	4/16/2014 1:38:42 AM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Naphthalene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2-Nitroaniline	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
3-Nitroaniline	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4-Nitroaniline	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Nitrobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2-Nitrophenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
4-Nitrophenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Pentachlorophenol	ND	20		µg/L	1	4/16/2014 1:38:42 AM	12681
Phenanthrene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Phenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Pyrene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Pyridine	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/16/2014 1:38:42 AM	12681
Surr: 2-Fluorophenol	71.0	12.1-85.8		%REC	1	4/16/2014 1:38:42 AM	12681
Surr: Phenol-d5	50.2	17.7-65.8		%REC	1	4/16/2014 1:38:42 AM	12681
Surr: 2,4,6-Tribromophenol	87.7	26-138		%REC	1	4/16/2014 1:38:42 AM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 3:40:00 PM
Lab ID: 1404550-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	90.8	47.5-119		%REC	1	4/16/2014 1:38:42 AM	12681
Surr: 2-Fluorobiphenyl	89.8	48.1-106		%REC	1	4/16/2014 1:38:42 AM	12681
Surr: 4-Terphenyl-d14	93.6	44-113		%REC	1	4/16/2014 1:38:42 AM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Toluene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Ethylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Methyl tert-butyl ether (MTBE)	12	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Naphthalene	ND	2.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Acetone	ND	10		µg/L	1	4/16/2014 12:34:55 AM	R18006
Bromobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Bromoform	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Bromomethane	ND	3.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
2-Butanone	ND	10		µg/L	1	4/16/2014 12:34:55 AM	R18006
Carbon disulfide	ND	10		µg/L	1	4/16/2014 12:34:55 AM	R18006
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Chlorobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Chloroethane	ND	2.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Chloroform	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Chloromethane	ND	3.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Dibromomethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,1-Dichloroethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: Hydrocarbon Seep
Collection Date: 4/9/2014 3:40:00 PM
Lab ID: 1404550-004
Matrix: AQUEOUS
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
2-Hexanone	ND	10		µg/L	1	4/16/2014 12:34:55 AM	R18006
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2014 12:34:55 AM	R18006
Methylene Chloride	ND	3.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
n-Butylbenzene	ND	3.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Styrene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Vinyl chloride	ND	1.0		µg/L	1	4/16/2014 12:34:55 AM	R18006
Xylenes, Total	ND	1.5		µg/L	1	4/16/2014 12:34:55 AM	R18006
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/16/2014 12:34:55 AM	R18006
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	4/16/2014 12:34:55 AM	R18006
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/16/2014 12:34:55 AM	R18006
Surr: Toluene-d8	93.5	70-130		%REC	1	4/16/2014 12:34:55 AM	R18006
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/16/2014 9:11:41 PM	R18044
Surr: BFB	94.8	70-130		%REC	1	4/16/2014 9:11:41 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404550-005
Matrix: TRIP BLANK
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Toluene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Ethylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Naphthalene	ND	2.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
2-Methylnaphthalene	ND	4.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Acetone	ND	10		µg/L	1	4/16/2014 1:03:43 AM	R18006
Bromobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Bromodichloromethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Bromoform	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Bromomethane	ND	3.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
2-Butanone	ND	10		µg/L	1	4/16/2014 1:03:43 AM	R18006
Carbon disulfide	ND	10		µg/L	1	4/16/2014 1:03:43 AM	R18006
Carbon Tetrachloride	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Chlorobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Chloroethane	ND	2.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Chloroform	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Chloromethane	ND	3.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
2-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
4-Chlorotoluene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
cis-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Dibromochloromethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Dibromomethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,1-Dichloroethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,1-Dichloroethene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,3-Dichloropropane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
2,2-Dichloropropane	ND	2.0		µg/L	1	4/16/2014 1:03:43 AM	R18006

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404550-005
Matrix: TRIP BLANK
Received Date: 4/11/2014 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Hexachlorobutadiene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
2-Hexanone	ND	10		µg/L	1	4/16/2014 1:03:43 AM	R18006
Isopropylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
4-Isopropyltoluene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
4-Methyl-2-pentanone	ND	10		µg/L	1	4/16/2014 1:03:43 AM	R18006
Methylene Chloride	ND	3.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
n-Butylbenzene	ND	3.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
n-Propylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
sec-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Styrene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
tert-Butylbenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
trans-1,2-DCE	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Trichlorofluoromethane	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Vinyl chloride	ND	1.0		µg/L	1	4/16/2014 1:03:43 AM	R18006
Xylenes, Total	ND	1.5		µg/L	1	4/16/2014 1:03:43 AM	R18006
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/16/2014 1:03:43 AM	R18006
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	4/16/2014 1:03:43 AM	R18006
Surr: Dibromofluoromethane	106	70-130		%REC	1	4/16/2014 1:03:43 AM	R18006
Surr: Toluene-d8	91.5	70-130		%REC	1	4/16/2014 1:03:43 AM	R18006

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**MB-12674**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**PBW**	Batch ID:	**12674**	RunNo:	**17956**					
Prep Date:	**4/11/2014**	Analysis Date:	**4/15/2014**	SeqNo:	**519044**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		102	62.7	145			

Sample ID	**LCS-12674**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**LCSW**	Batch ID:	**12674**	RunNo:	**17956**					
Prep Date:	**4/11/2014**	Analysis Date:	**4/15/2014**	SeqNo:	**519057**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.7	78.6	146			
Surr: DNOP	0.42		0.5000		85.0	62.7	145			

Sample ID	**LCSD-12674**	SampType:	**LCSD**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**LCSS02**	Batch ID:	**12674**	RunNo:	**17956**					
Prep Date:	**4/11/2014**	Analysis Date:	**4/15/2014**	SeqNo:	**519058**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	100	78.6	146	5.35	26.5	
Surr: DNOP	0.45		0.5000		90.7	62.7	145	0	0	

Qualifiers:

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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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18006**	RunNo: **18006**			
Prep Date:	Analysis Date: **4/15/2014**	SeqNo: **519480**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18006** RunNo: **18006**
Prep Date: Analysis Date: **4/15/2014** SeqNo: **519480** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		96.2	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18006** RunNo: **18006**
Prep Date: Analysis Date: **4/15/2014** SeqNo: **519486** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.1	70	130			
Toluene	17	1.0	20.00	0	85.5	80	120			
Chlorobenzene	17	1.0	20.00	0	82.8	70	130			

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **LCSW**	Batch ID: **R18006**		RunNo: **18006**		
Prep Date:	Analysis Date: **4/15/2014**		SeqNo: **519486**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	97.2	90	143			
Trichloroethene (TCE)	18	1.0	20.00	0	90.6	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.0	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			

Sample ID **b2**	SampType: **MBLK**		TestCode: **EPA Method 8260B: VOLATILES**		
Client ID: **PBW**	Batch ID: **R18044**		RunNo: **18044**		
Prep Date:	Analysis Date: **4/16/2014**		SeqNo: **520592**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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.
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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R18044**	RunNo: **18044**	
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520592**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R18044**	RunNo: **18044**			
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520592**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R18044**	RunNo: **18044**			
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520614**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	70	130			
Toluene	17	1.0	20.00	0	84.5	80	120			
Chlorobenzene	17	1.0	20.00	0	83.6	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.8	90	143			
Trichloroethene (TCE)	18	1.0	20.00	0	91.0	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		99.9	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		56.2	12.1	85.8			
Surr: Phenol-d5	120		200.0		59.6	17.7	65.8			
Surr: 2,4,6-Tribromophenol	110		200.0		57.1	26	138			
Surr: Nitrobenzene-d5	58		100.0		58.4	47.5	119			
Surr: 2-Fluorobiphenyl	63		100.0		62.6	48.1	106			
Surr: 4-Terphenyl-d14	63		100.0		63.1	44	113			

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12681** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12681** RunNo: **17998**
Prep Date: **4/12/2014** Analysis Date: **4/15/2014** SeqNo: **519466** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	60	10	100.0	0	60.4	50.3	109			
4-Chloro-3-methylphenol	130	10	200.0	0	63.4	51.2	113			
2-Chlorophenol	130	10	200.0	0	63.6	48.5	104			
1,4-Dichlorobenzene	66	10	100.0	0	65.9	39.5	106			
2,4-Dinitrotoluene	51	10	100.0	0	50.8	45.4	107			
N-Nitrosodi-n-propylamine	61	10	100.0	0	61.1	50.4	119			
4-Nitrophenol	110	10	200.0	0	54.7	15.5	62.2			
Pentachlorophenol	100	20	200.0	0	51.0	23.5	93.5			
Phenol	130	10	200.0	0	63.6	26.8	65.6			
Pyrene	73	10	100.0	0	73.0	54.4	108			
1,2,4-Trichlorobenzene	63	10	100.0	0	63.2	39.9	106			
Surr: 2-Fluorophenol	130		200.0		63.2	12.1	85.8			
Surr: Phenol-d5	130		200.0		66.8	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	150		200.0		73.0	26	138			
Surr: Nitrobenzene-d5	68		100.0		67.6	47.5	119			
Surr: 2-Fluorobiphenyl	69		100.0		69.5	48.1	106			
Surr: 4-Terphenyl-d14	78		100.0		77.5	44	113			

Sample ID **mb-12707** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		55.1	12.1	85.8			
Surr: Phenol-d5	84		200.0		42.2	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		93.5	26	138			
Surr: Nitrobenzene-d5	71		100.0		71.4	47.5	119			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	48.1	106			
Surr: 4-Terphenyl-d14	90		100.0		89.7	44	113			

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.5	50.3	109			
4-Chloro-3-methylphenol	150	10	200.0	0	74.8	51.2	113			
2-Chlorophenol	140	10	200.0	0	69.9	48.5	104			
1,4-Dichlorobenzene	69	10	100.0	0	68.8	39.5	106			
2,4-Dinitrotoluene	71	10	100.0	0	71.3	45.4	107			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.7	50.4	119			
4-Nitrophenol	160	10	200.0	0	80.4	15.5	62.2			S
Pentachlorophenol	150	20	200.0	0	74.9	23.5	93.5			
Phenol	150	10	200.0	0	73.6	26.8	65.6			S
Pyrene	79	10	100.0	0	79.4	54.4	108			
1,2,4-Trichlorobenzene	68	10	100.0	0	67.8	39.9	106			

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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	140		200.0		71.1	12.1	85.8			
Surr: Phenol-d5	140		200.0		71.9	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	170		200.0		85.2	26	138			
Surr: Nitrobenzene-d5	73		100.0		72.7	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	48.1	106			
Surr: 4-Terphenyl-d14	81		100.0		80.6	44	113			

Sample ID **lcsd-12707** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	66	10	100.0	0	66.3	50.3	109	7.61	27.2	
4-Chloro-3-methylphenol	140	10	200.0	0	70.3	51.2	113	6.31	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	4.01	22.5	
1,4-Dichlorobenzene	67	10	100.0	0	67.2	39.5	106	2.32	24.6	
2,4-Dinitrotoluene	59	10	100.0	0	59.2	45.4	107	18.5	25.3	
N-Nitrosodi-n-propylamine	66	10	100.0	0	66.4	50.4	119	7.62	23.6	
4-Nitrophenol	140	10	200.0	0	67.6	15.5	62.2	17.2	34.7	S
Pentachlorophenol	130	20	200.0	0	63.4	23.5	93.5	16.6	32.8	
Phenol	140	10	200.0	0	70.0	26.8	65.6	5.02	25.5	S
Pyrene	73	10	100.0	0	73.3	54.4	108	7.94	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	65.5	39.9	106	3.39	25.9	
Surr: 2-Fluorophenol	130		200.0		65.5	12.1	85.8	0	0	
Surr: Phenol-d5	130		200.0		67.0	17.7	65.8	0	0	S
Surr: 2,4,6-Tribromophenol	160		200.0		80.2	26	138	0	0	
Surr: Nitrobenzene-d5	65		100.0		64.7	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.9	48.1	106	0	0	
Surr: 4-Terphenyl-d14	75		100.0		75.1	44	113	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.
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#: **1404550**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**5mL rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520568** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		96.0	70	130			

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	85.2	80	120			
Surr: BFB	9.9		10.00		98.7	70	130			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1404550 RcptNo: 1

Received by/date: MG 04/11/14

Logged By: Michelle Garcia 4/11/2014 9:30:00 AM Michelle Garcia

Completed By: Michelle Garcia 4/11/2014 11:13:43 AM Michelle Garcia

Reviewed By: 04/11/14

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? 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Phone #: 505-722-0231
email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☐ EDD (Type) ____

☑ Standard ☐ Rush ____
Project Name: HYDROCARBON SEEP
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE 361.438.1668
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404550	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
1.9.14	1250	~~GW~~ WT	EB02	6, 40 mL VOA 1 L AMBER	HCL / NEAT	-001			✓							✓	✓					
	1300	GW	MKTF-32			-002			✓							✓	✓					
	1430	GW	MKTF-30			-003			✓							✓	✓					
	1540	GW	MKTF-29			-004			✓							✓	✓					
✓	—	W	TRIP BLANK	2, 40 mL VOA	HCL	-005										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
1.10.14	1707	[signature]	[signature]	04/11/14	0930
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 24, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404476

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/10/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 1:45:00 PM
Lab ID: 1404476-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 9:05:54 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 9:05:54 PM	12625
Surr: DNOP	103	62.7-145		%REC	1	4/14/2014 9:05:54 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Acenaphthylene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Aniline	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Anthracene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Azobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Benzoic acid	ND	20		µg/L	1	4/15/2014 4:41:45 PM	12681
Benzyl alcohol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Carbazole	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4-Chloroaniline	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2-Chlorophenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Chrysene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Dibenzofuran	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Diethyl phthalate	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 1:45:00 PM
Lab ID: 1404476-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/15/2014 4:41:45 PM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/15/2014 4:41:45 PM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/15/2014 4:41:45 PM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Fluoranthene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Fluorene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Hexachloroethane	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Isophorone	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2-Methylphenol	ND	20		µg/L	1	4/15/2014 4:41:45 PM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Naphthalene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2-Nitroaniline	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
3-Nitroaniline	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4-Nitroaniline	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Nitrobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2-Nitrophenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
4-Nitrophenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Pentachlorophenol	ND	20		µg/L	1	4/15/2014 4:41:45 PM	12681
Phenanthrene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Phenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Pyrene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Pyridine	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/15/2014 4:41:45 PM	12681
Surr: 2-Fluorophenol	61.5	12.1-85.8		%REC	1	4/15/2014 4:41:45 PM	12681
Surr: Phenol-d5	46.7	17.7-65.8		%REC	1	4/15/2014 4:41:45 PM	12681
Surr: 2,4,6-Tribromophenol	84.0	26-138		%REC	1	4/15/2014 4:41:45 PM	12681

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 1:45:00 PM
Lab ID: 1404476-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	91.3	47.5-119		%REC	1	4/15/2014 4:41:45 PM	12681
Surr: 2-Fluorobiphenyl	97.2	48.1-106		%REC	1	4/15/2014 4:41:45 PM	12681
Surr: 4-Terphenyl-d14	99.4	44-113		%REC	1	4/15/2014 4:41:45 PM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Toluene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Ethylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Methyl tert-butyl ether (MTBE)	55	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2-Dichloroethane (EDC)	21	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Naphthalene	ND	2.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1-Methylnaphthalene	ND	4.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
2-Methylnaphthalene	ND	4.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Acetone	ND	10		µg/L	1	4/11/2014 12:37:05 AM	R17921
Bromobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Bromodichloromethane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Bromoform	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Bromomethane	ND	3.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
2-Butanone	ND	10		µg/L	1	4/11/2014 12:37:05 AM	R17921
Carbon disulfide	ND	10		µg/L	1	4/11/2014 12:37:05 AM	R17921
Carbon Tetrachloride	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Chlorobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Chloroethane	ND	2.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Chloroform	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Chloromethane	ND	3.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
2-Chlorotoluene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
4-Chlorotoluene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
cis-1,2-DCE	1.6	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Dibromochloromethane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Dibromomethane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,1-Dichloroethane	28	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921

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

Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 1:45:00 PM
Lab ID: 1404476-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
1,1-Dichloroethene	59	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2-Dichloropropane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,3-Dichloropropane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
2,2-Dichloropropane	ND	2.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,1-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Hexachlorobutadiene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
2-Hexanone	ND	10		µg/L	1	4/11/2014 12:37:05 AM	R17921
Isopropylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
4-Isopropyltoluene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
4-Methyl-2-pentanone	ND	10		µg/L	1	4/11/2014 12:37:05 AM	R17921
Methylene Chloride	ND	3.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
n-Butylbenzene	ND	3.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
n-Propylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
sec-Butylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Styrene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
tert-Butylbenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
trans-1,2-DCE	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,1,1-Trichloroethane	5.8	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,1,2-Trichloroethane	1.8	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Trichloroethene (TCE)	3.0	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Trichlorofluoromethane	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Vinyl chloride	ND	1.0		µg/L	1	4/11/2014 12:37:05 AM	R17921
Xylenes, Total	ND	1.5		µg/L	1	4/11/2014 12:37:05 AM	R17921
Surr: 1,2-Dichloroethane-d4	112	70-130		%REC	1	4/11/2014 12:37:05 AM	R17921
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	1	4/11/2014 12:37:05 AM	R17921
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/11/2014 12:37:05 AM	R17921
Surr: Toluene-d8	109	70-130		%REC	1	4/11/2014 12:37:05 AM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	0.11	0.050		mg/L	1	4/16/2014 4:23:48 PM	R18044
Surr: BFB	96.7	70-130		%REC	1	4/16/2014 4:23:48 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 3:30:00 PM
Lab ID: 1404476-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 9:28:00 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 9:28:00 PM	12625
Surr: DNOP	87.7	62.7-145		%REC	1	4/14/2014 9:28:00 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Acenaphthylene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Aniline	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Anthracene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Azobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Benzoic acid	ND	20		µg/L	1	4/15/2014 5:11:21 PM	12681
Benzyl alcohol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Carbazole	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4-Chloroaniline	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2-Chlorophenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Chrysene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Dibenzofuran	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Diethyl phthalate	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 3:30:00 PM
Lab ID: 1404476-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/15/2014 5:11:21 PM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/15/2014 5:11:21 PM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/15/2014 5:11:21 PM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Fluoranthene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Fluorene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Hexachloroethane	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Isophorone	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2-Methylphenol	ND	20		µg/L	1	4/15/2014 5:11:21 PM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Naphthalene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2-Nitroaniline	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
3-Nitroaniline	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4-Nitroaniline	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Nitrobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2-Nitrophenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
4-Nitrophenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Pentachlorophenol	ND	20		µg/L	1	4/15/2014 5:11:21 PM	12681
Phenanthrene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Phenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Pyrene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Pyridine	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/15/2014 5:11:21 PM	12681
Surr: 2-Fluorophenol	62.2	12.1-85.8		%REC	1	4/15/2014 5:11:21 PM	12681
Surr: Phenol-d5	47.1	17.7-65.8		%REC	1	4/15/2014 5:11:21 PM	12681
Surr: 2,4,6-Tribromophenol	85.2	26-138		%REC	1	4/15/2014 5:11:21 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 3:30:00 PM
Lab ID: 1404476-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	87.0	47.5-119		%REC	1	4/15/2014 5:11:21 PM	12681
Surr: 2-Fluorobiphenyl	91.4	48.1-106		%REC	1	4/15/2014 5:11:21 PM	12681
Surr: 4-Terphenyl-d14	88.6	44-113		%REC	1	4/15/2014 5:11:21 PM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	110	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Toluene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Ethylbenzene	3.5	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Methyl tert-butyl ether (MTBE)	36	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2,4-Trimethylbenzene	3.5	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2-Dichloroethane (EDC)	6.8	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Naphthalene	ND	4.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1-Methylnaphthalene	ND	8.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
2-Methylnaphthalene	ND	8.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Acetone	ND	20		µg/L	2	4/11/2014 1:37:13 AM	R17921
Bromobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Bromodichloromethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Bromoform	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Bromomethane	ND	6.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
2-Butanone	ND	20		µg/L	2	4/11/2014 1:37:13 AM	R17921
Carbon disulfide	ND	20		µg/L	2	4/11/2014 1:37:13 AM	R17921
Carbon Tetrachloride	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Chlorobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Chloroethane	ND	4.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Chloroform	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Chloromethane	ND	6.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
2-Chlorotoluene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
4-Chlorotoluene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
cis-1,2-DCE	5.2	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Dibromochloromethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Dibromomethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2-Dichlorobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,3-Dichlorobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,4-Dichlorobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Dichlorodifluoromethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,1-Dichloroethane	41	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 3:30:00 PM
Lab ID: 1404476-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	34	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2-Dichloropropane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,3-Dichloropropane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
2,2-Dichloropropane	ND	4.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,1-Dichloropropene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Hexachlorobutadiene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
2-Hexanone	ND	20		µg/L	2	4/11/2014 1:37:13 AM	R17921
Isopropylbenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
4-Isopropyltoluene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
4-Methyl-2-pentanone	ND	20		µg/L	2	4/11/2014 1:37:13 AM	R17921
Methylene Chloride	ND	6.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
n-Butylbenzene	ND	6.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
n-Propylbenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
sec-Butylbenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Styrene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
tert-Butylbenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
trans-1,2-DCE	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,1,1-Trichloroethane	2.2	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,1,2-Trichloroethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Trichloroethene (TCE)	3.4	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Trichlorofluoromethane	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
1,2,3-Trichloropropane	ND	4.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Vinyl chloride	ND	2.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Xylenes, Total	7.6	3.0		µg/L	2	4/11/2014 1:37:13 AM	R17921
Surr: 1,2-Dichloroethane-d4	126	70-130		%REC	2	4/11/2014 1:37:13 AM	R17921
Surr: 4-Bromofluorobenzene	90.6	70-130		%REC	2	4/11/2014 1:37:13 AM	R17921
Surr: Dibromofluoromethane	107	70-130		%REC	2	4/11/2014 1:37:13 AM	R17921
Surr: Toluene-d8	108	70-130		%REC	2	4/11/2014 1:37:13 AM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	0.67	0.050		mg/L	1	4/16/2014 4:52:36 PM	R18044
Surr: BFB	98.8	70-130		%REC	1	4/16/2014 4:52:36 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB01
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 4:45:00 PM
Lab ID: 1404476-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 9:49:59 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 9:49:59 PM	12625
Surr: DNOP	87.0	62.7-145		%REC	1	4/14/2014 9:49:59 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Acenaphthylene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Aniline	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Anthracene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Azobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Benzoic acid	ND	20		µg/L	1	4/15/2014 10:14:32 PM	12681
Benzyl alcohol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Carbazole	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4-Chloroaniline	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2-Chlorophenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Chrysene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Dibenzofuran	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Diethyl phthalate	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB01
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 4:45:00 PM
Lab ID: 1404476-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/15/2014 10:14:32 PM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/15/2014 10:14:32 PM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/15/2014 10:14:32 PM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Fluoranthene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Fluorene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Hexachloroethane	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Isophorone	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2-Methylphenol	ND	20		µg/L	1	4/15/2014 10:14:32 PM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Naphthalene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2-Nitroaniline	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
3-Nitroaniline	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4-Nitroaniline	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Nitrobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2-Nitrophenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
4-Nitrophenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Pentachlorophenol	ND	20		µg/L	1	4/15/2014 10:14:32 PM	12681
Phenanthrene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Phenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Pyrene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Pyridine	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/15/2014 10:14:32 PM	12681
Surr: 2-Fluorophenol	53.0	12.1-85.8		%REC	1	4/15/2014 10:14:32 PM	12681
Surr: Phenol-d5	39.6	17.7-65.8		%REC	1	4/15/2014 10:14:32 PM	12681
Surr: 2,4,6-Tribromophenol	48.1	26-138		%REC	1	4/15/2014 10:14:32 PM	12681

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB01
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 4:45:00 PM
Lab ID: 1404476-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	56.4	47.5-119		%REC	1	4/15/2014 10:14:32 PM	12681
Surr: 2-Fluorobiphenyl	52.1	48.1-106		%REC	1	4/15/2014 10:14:32 PM	12681
Surr: 4-Terphenyl-d14	74.1	44-113		%REC	1	4/15/2014 10:14:32 PM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Toluene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Ethylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Naphthalene	ND	2.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1-Methylnaphthalene	ND	4.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
2-Methylnaphthalene	ND	4.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Acetone	ND	10		µg/L	1	4/11/2014 2:07:26 AM	R17921
Bromobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Bromodichloromethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Bromoform	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Bromomethane	ND	3.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
2-Butanone	ND	10		µg/L	1	4/11/2014 2:07:26 AM	R17921
Carbon disulfide	ND	10		µg/L	1	4/11/2014 2:07:26 AM	R17921
Carbon Tetrachloride	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Chlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Chloroethane	ND	2.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Chloroform	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Chloromethane	ND	3.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
2-Chlorotoluene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
4-Chlorotoluene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
cis-1,2-DCE	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Dibromochloromethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Dibromomethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,1-Dichloroethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB01
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 4:45:00 PM
Lab ID: 1404476-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2-Dichloropropane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,3-Dichloropropane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
2,2-Dichloropropane	ND	2.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,1-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Hexachlorobutadiene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
2-Hexanone	ND	10		µg/L	1	4/11/2014 2:07:26 AM	R17921
Isopropylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
4-Isopropyltoluene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
4-Methyl-2-pentanone	ND	10		µg/L	1	4/11/2014 2:07:26 AM	R17921
Methylene Chloride	ND	3.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
n-Butylbenzene	ND	3.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
n-Propylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
sec-Butylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Styrene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
tert-Butylbenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
trans-1,2-DCE	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Trichlorofluoromethane	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Vinyl chloride	ND	1.0		µg/L	1	4/11/2014 2:07:26 AM	R17921
Xylenes, Total	ND	1.5		µg/L	1	4/11/2014 2:07:26 AM	R17921
Surr: 1,2-Dichloroethane-d4	112	70-130		%REC	1	4/11/2014 2:07:26 AM	R17921
Surr: 4-Bromofluorobenzene	93.0	70-130		%REC	1	4/11/2014 2:07:26 AM	R17921
Surr: Dibromofluoromethane	106	70-130		%REC	1	4/11/2014 2:07:26 AM	R17921
Surr: Toluene-d8	104	70-130		%REC	1	4/11/2014 2:07:26 AM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/16/2014 5:21:28 PM	R18044
Surr: BFB	93.5	70-130		%REC	1	4/16/2014 5:21:28 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404476-004
Matrix: TRIP BLANK
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Toluene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Ethylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Naphthalene	ND	2.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1-Methylnaphthalene	ND	4.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
2-Methylnaphthalene	ND	4.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Acetone	ND	10		µg/L	1	4/11/2014 2:37:39 AM	R17921
Bromobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Bromodichloromethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Bromoform	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Bromomethane	ND	3.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
2-Butanone	ND	10		µg/L	1	4/11/2014 2:37:39 AM	R17921
Carbon disulfide	ND	10		µg/L	1	4/11/2014 2:37:39 AM	R17921
Carbon Tetrachloride	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Chlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Chloroethane	ND	2.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Chloroform	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Chloromethane	ND	3.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
2-Chlorotoluene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
4-Chlorotoluene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
cis-1,2-DCE	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Dibromochloromethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Dibromomethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,1-Dichloroethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,1-Dichloroethene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2-Dichloropropane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,3-Dichloropropane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
2,2-Dichloropropane	ND	2.0		µg/L	1	4/11/2014 2:37:39 AM	R17921

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404476-004
Matrix: TRIP BLANK
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Hexachlorobutadiene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
2-Hexanone	ND	10		µg/L	1	4/11/2014 2:37:39 AM	R17921
Isopropylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
4-Isopropyltoluene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
4-Methyl-2-pentanone	ND	10		µg/L	1	4/11/2014 2:37:39 AM	R17921
Methylene Chloride	ND	3.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
n-Butylbenzene	ND	3.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
n-Propylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
sec-Butylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Styrene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
tert-Butylbenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
trans-1,2-DCE	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Trichlorofluoromethane	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Vinyl chloride	ND	1.0		µg/L	1	4/11/2014 2:37:39 AM	R17921
Xylenes, Total	ND	1.5		µg/L	1	4/11/2014 2:37:39 AM	R17921
Surr: 1,2-Dichloroethane-d4	121	70-130		%REC	1	4/11/2014 2:37:39 AM	R17921
Surr: 4-Bromofluorobenzene	89.1	70-130		%REC	1	4/11/2014 2:37:39 AM	R17921
Surr: Dibromofluoromethane	108	70-130		%REC	1	4/11/2014 2:37:39 AM	R17921
Surr: Toluene-d8	113	70-130		%REC	1	4/11/2014 2:37:39 AM	R17921

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12625** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518822** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	62.7	145			

Sample ID **LCS-12625** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518851** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	107	78.6	146			
Surr: DNOP	0.49		0.5000		98.9	62.7	145			

Sample ID **LCSD-12625** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	113	78.6	146	5.22	26.5	
Surr: DNOP	0.52		0.5000		104	62.7	145	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.
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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R17921**	RunNo: **17921**			
Prep Date:	Analysis Date: **4/10/2014**	SeqNo: **516977**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R17921** RunNo: **17921**
Prep Date: Analysis Date: **4/10/2014** SeqNo: **516977** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.7		10.00		76.9	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		88.3	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R17921** RunNo: **17921**
Prep Date: Analysis Date: **4/10/2014** SeqNo: **516979** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	96.0	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			

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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R17921** RunNo: **17921**
Prep Date: Analysis Date: **4/10/2014** SeqNo: **516979** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	119	90	143			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	7.6		10.00		76.3	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.2	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.2	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18044** RunNo: **18044**
Prep Date: Analysis Date: **4/16/2014** SeqNo: **520592** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18044** RunNo: **18044**
Prep Date: Analysis Date: **4/16/2014** SeqNo: **520614** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		99.9	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		56.2	12.1	85.8			
Surr: Phenol-d5	120		200.0		59.6	17.7	65.8			
Surr: 2,4,6-Tribromophenol	110		200.0		57.1	26	138			
Surr: Nitrobenzene-d5	58		100.0		58.4	47.5	119			
Surr: 2-Fluorobiphenyl	63		100.0		62.6	48.1	106			
Surr: 4-Terphenyl-d14	63		100.0		63.1	44	113			

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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12681** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12681** RunNo: **17998**
Prep Date: **4/12/2014** Analysis Date: **4/15/2014** SeqNo: **519466** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	60	10	100.0	0	60.4	50.3	109			
4-Chloro-3-methylphenol	130	10	200.0	0	63.4	51.2	113			
2-Chlorophenol	130	10	200.0	0	63.6	48.5	104			
1,4-Dichlorobenzene	66	10	100.0	0	65.9	39.5	106			
2,4-Dinitrotoluene	51	10	100.0	0	50.8	45.4	107			
N-Nitrosodi-n-propylamine	61	10	100.0	0	61.1	50.4	119			
4-Nitrophenol	110	10	200.0	0	54.7	15.5	62.2			
Pentachlorophenol	100	20	200.0	0	51.0	23.5	93.5			
Phenol	130	10	200.0	0	63.6	26.8	65.6			
Pyrene	73	10	100.0	0	73.0	54.4	108			
1,2,4-Trichlorobenzene	63	10	100.0	0	63.2	39.9	106			
Surr: 2-Fluorophenol	130		200.0		63.2	12.1	85.8			
Surr: Phenol-d5	130		200.0		66.8	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	150		200.0		73.0	26	138			
Surr: Nitrobenzene-d5	68		100.0		67.6	47.5	119			
Surr: 2-Fluorobiphenyl	69		100.0		69.5	48.1	106			
Surr: 4-Terphenyl-d14	78		100.0		77.5	44	113			

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#: **1404476**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**5mL rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520568** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		96.0	70	130			

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	85.2	80	120			
Surr: BFB	9.9		10.00		98.7	70	130			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1404476 RcptNo: 1

Received by/date: LM 04/10/14

Logged By: **Michelle Garcia** 4/10/2014 8:45:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 4/10/2014 9:35:10 AM Michelle Garcia

Reviewed By: 04/10/14

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? 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.8	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW GALLUP REFINERY

Mailing Address: 92 GIANT CROSSING RD GALLUP, NM 87301

Phone #: 505-722-0231

email or Fax#: CHERYL.JOHNSON@WNR.COM

QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)

Accreditation ☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: ☑ Standard ☐ Rush _____

Project Name: HYDROCARBON SEEP

Project #:

Project Manager: CHERYL JOHNSON

Sampler: TRACY PAYNE 361.438.1668

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404476	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
8.14	1345	GW	MKTF-31	6 40 ML VOA 2 1L AMBER	HCL / NEAT	-001			✓							✓	✓				
↓	1530	↓	MKTF-02	↓	↓	-002			✓							✓	✓				
↓	1645	W	EB01	↓	↓	-003			✓							✓	✓				
—	—	W	TRIP BLANK	2 40 ML VOA	HCL	-004										✓					

Date:	Time:	Relinquished by:	Received by:	Date	Time
8.9.14	0645	[signature]	[signature]	04/10/14	0845
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 24, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404472

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/10/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1404472**
Date Reported: **4/24/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 9:45:00 AM
Lab ID: 1404472-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 7:37:44 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 7:37:44 PM	12625
Surr: DNOP	107	62.7-145		%REC	1	4/14/2014 7:37:44 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Acenaphthylene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Aniline	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Anthracene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Azobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Benzoic acid	ND	20		µg/L	1	4/15/2014 2:43:19 PM	12681
Benzyl alcohol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Carbazole	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4-Chloroaniline	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2-Chlorophenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Chrysene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Dibenzofuran	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Diethyl phthalate	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 9:45:00 AM
Lab ID: 1404472-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/15/2014 2:43:19 PM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/15/2014 2:43:19 PM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/15/2014 2:43:19 PM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Fluoranthene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Fluorene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Hexachloroethane	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Isophorone	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2-Methylphenol	ND	20		µg/L	1	4/15/2014 2:43:19 PM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Naphthalene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2-Nitroaniline	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
3-Nitroaniline	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4-Nitroaniline	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Nitrobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2-Nitrophenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
4-Nitrophenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Pentachlorophenol	ND	20		µg/L	1	4/15/2014 2:43:19 PM	12681
Phenanthrene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Phenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Pyrene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Pyridine	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/15/2014 2:43:19 PM	12681
Surr: 2-Fluorophenol	73.8	12.1-85.8		%REC	1	4/15/2014 2:43:19 PM	12681
Surr: Phenol-d5	52.6	17.7-65.8		%REC	1	4/15/2014 2:43:19 PM	12681
Surr: 2,4,6-Tribromophenol	93.8	26-138		%REC	1	4/15/2014 2:43:19 PM	12681

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 9:45:00 AM
Lab ID: 1404472-001
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	105	47.5-119		%REC	1	4/15/2014 2:43:19 PM	12681
Surr: 2-Fluorobiphenyl	91.5	48.1-106		%REC	1	4/15/2014 2:43:19 PM	12681
Surr: 4-Terphenyl-d14	103	44-113		%REC	1	4/15/2014 2:43:19 PM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Toluene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Ethylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Methyl tert-butyl ether (MTBE)	38	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Naphthalene	ND	4.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1-Methylnaphthalene	ND	8.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
2-Methylnaphthalene	ND	8.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Acetone	ND	20		µg/L	2	4/10/2014 7:35:10 PM	R17921
Bromobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Bromodichloromethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Bromoform	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Bromomethane	ND	6.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
2-Butanone	ND	20		µg/L	2	4/10/2014 7:35:10 PM	R17921
Carbon disulfide	ND	20		µg/L	2	4/10/2014 7:35:10 PM	R17921
Carbon Tetrachloride	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Chlorobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Chloroethane	ND	4.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Chloroform	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Chloromethane	ND	6.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
2-Chlorotoluene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
4-Chlorotoluene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
cis-1,2-DCE	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Dibromochloromethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Dibromomethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2-Dichlorobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,3-Dichlorobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,4-Dichlorobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Dichlorodifluoromethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,1-Dichloroethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921

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

Qualifiers:

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Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2-Dichloropropane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,3-Dichloropropane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
2,2-Dichloropropane	ND	4.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,1-Dichloropropene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Hexachlorobutadiene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
2-Hexanone	ND	20		µg/L	2	4/10/2014 7:35:10 PM	R17921
Isopropylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
4-Isopropyltoluene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
4-Methyl-2-pentanone	ND	20		µg/L	2	4/10/2014 7:35:10 PM	R17921
Methylene Chloride	ND	6.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
n-Butylbenzene	ND	6.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
n-Propylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
sec-Butylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Styrene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
tert-Butylbenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
trans-1,2-DCE	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,1,1-Trichloroethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,1,2-Trichloroethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Trichloroethene (TCE)	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Trichlorofluoromethane	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
1,2,3-Trichloropropane	ND	4.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Vinyl chloride	ND	2.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Xylenes, Total	ND	3.0		µg/L	2	4/10/2014 7:35:10 PM	R17921
Surr: 1,2-Dichloroethane-d4	114	70-130		%REC	2	4/10/2014 7:35:10 PM	R17921
Surr: 4-Bromofluorobenzene	90.8	70-130		%REC	2	4/10/2014 7:35:10 PM	R17921
Surr: Dibromofluoromethane	104	70-130		%REC	2	4/10/2014 7:35:10 PM	R17921
Surr: Toluene-d8	104	70-130		%REC	2	4/10/2014 7:35:10 PM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	ND	0.10		mg/L	2	4/16/2014 12:33:52 PM	R18044
Surr: BFB	93.8	70-130		%REC	2	4/16/2014 12:33:52 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 10:50:00 AM
Lab ID: 1404472-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 7:59:58 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 7:59:58 PM	12625
Surr: DNOP	102	62.7-145		%REC	1	4/14/2014 7:59:58 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Acenaphthylene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Aniline	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Anthracene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Azobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Benz(a)anthracene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Benzo(a)pyrene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Benzo(b)fluoranthene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Benzo(g,h,i)perylene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Benzo(k)fluoranthene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Benzoic acid	ND	23		µg/L	1	4/16/2014 1:52:59 PM	12707
Benzyl alcohol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Bis(2-chloroethoxy)methane	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Bis(2-chloroethyl)ether	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Bis(2-chloroisopropyl)ether	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Bis(2-ethylhexyl)phthalate	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4-Bromophenyl phenyl ether	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Butyl benzyl phthalate	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Carbazole	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4-Chloro-3-methylphenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4-Chloroaniline	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2-Chloronaphthalene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2-Chlorophenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4-Chlorophenyl phenyl ether	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Chrysene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Di-n-butyl phthalate	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Di-n-octyl phthalate	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Dibenz(a,h)anthracene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Dibenzofuran	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
1,2-Dichlorobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
1,3-Dichlorobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
1,4-Dichlorobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
3,3´-Dichlorobenzidine	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Diethyl phthalate	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Dimethyl phthalate	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 10:50:00 AM
Lab ID: 1404472-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	23		µg/L	1	4/16/2014 1:52:59 PM	12707
2,4-Dimethylphenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4,6-Dinitro-2-methylphenol	ND	23		µg/L	1	4/16/2014 1:52:59 PM	12707
2,4-Dinitrophenol	ND	23		µg/L	1	4/16/2014 1:52:59 PM	12707
2,4-Dinitrotoluene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2,6-Dinitrotoluene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Fluoranthene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Fluorene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Hexachlorobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Hexachlorobutadiene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Hexachlorocyclopentadiene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Hexachloroethane	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Indeno(1,2,3-cd)pyrene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Isophorone	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
1-Methylnaphthalene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2-Methylnaphthalene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2-Methylphenol	ND	23		µg/L	1	4/16/2014 1:52:59 PM	12707
3+4-Methylphenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
N-Nitrosodi-n-propylamine	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
N-Nitrosodimethylamine	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
N-Nitrosodiphenylamine	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Naphthalene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2-Nitroaniline	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
3-Nitroaniline	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4-Nitroaniline	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Nitrobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2-Nitrophenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
4-Nitrophenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Pentachlorophenol	ND	23		µg/L	1	4/16/2014 1:52:59 PM	12707
Phenanthrene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Phenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Pyrene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Pyridine	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
1,2,4-Trichlorobenzene	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2,4,5-Trichlorophenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
2,4,6-Trichlorophenol	ND	12		µg/L	1	4/16/2014 1:52:59 PM	12707
Surr: 2-Fluorophenol	68.3	12.1-85.8		%REC	1	4/16/2014 1:52:59 PM	12707
Surr: Phenol-d5	48.9	17.7-65.8		%REC	1	4/16/2014 1:52:59 PM	12707
Surr: 2,4,6-Tribromophenol	87.8	26-138		%REC	1	4/16/2014 1:52:59 PM	12707

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 10:50:00 AM
Lab ID: 1404472-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	91.1	47.5-119		%REC	1	4/16/2014 1:52:59 PM	12707
Surr: 2-Fluorobiphenyl	89.1	48.1-106		%REC	1	4/16/2014 1:52:59 PM	12707
Surr: 4-Terphenyl-d14	97.9	44-113		%REC	1	4/16/2014 1:52:59 PM	12707
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	17	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Toluene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Ethylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Methyl tert-butyl ether (MTBE)	49	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2-Dichloroethane (EDC)	13	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Naphthalene	ND	2.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1-Methylnaphthalene	ND	4.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
2-Methylnaphthalene	ND	4.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Acetone	ND	10		µg/L	1	4/10/2014 8:05:31 PM	R17921
Bromobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Bromodichloromethane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Bromoform	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Bromomethane	ND	3.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
2-Butanone	ND	10		µg/L	1	4/10/2014 8:05:31 PM	R17921
Carbon disulfide	ND	10		µg/L	1	4/10/2014 8:05:31 PM	R17921
Carbon Tetrachloride	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Chlorobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Chloroethane	ND	2.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Chloroform	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Chloromethane	ND	3.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
2-Chlorotoluene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
4-Chlorotoluene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
cis-1,2-DCE	4.5	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Dibromochloromethane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Dibromomethane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,1-Dichloroethane	83	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 10:50:00 AM
Lab ID: 1404472-002
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	66	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2-Dichloropropane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,3-Dichloropropane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
2,2-Dichloropropane	ND	2.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,1-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Hexachlorobutadiene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
2-Hexanone	ND	10		µg/L	1	4/10/2014 8:05:31 PM	R17921
Isopropylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
4-Isopropyltoluene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
4-Methyl-2-pentanone	ND	10		µg/L	1	4/10/2014 8:05:31 PM	R17921
Methylene Chloride	ND	3.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
n-Butylbenzene	ND	3.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
n-Propylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
sec-Butylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Styrene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
tert-Butylbenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
trans-1,2-DCE	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,1,1-Trichloroethane	1.7	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,1,2-Trichloroethane	1.4	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Trichloroethene (TCE)	2.9	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Trichlorofluoromethane	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Vinyl chloride	ND	1.0		µg/L	1	4/10/2014 8:05:31 PM	R17921
Xylenes, Total	ND	1.5		µg/L	1	4/10/2014 8:05:31 PM	R17921
Surr: 1,2-Dichloroethane-d4	112	70-130		%REC	1	4/10/2014 8:05:31 PM	R17921
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	1	4/10/2014 8:05:31 PM	R17921
Surr: Dibromofluoromethane	105	70-130		%REC	1	4/10/2014 8:05:31 PM	R17921
Surr: Toluene-d8	103	70-130		%REC	1	4/10/2014 8:05:31 PM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	0.20	0.050		mg/L	1	4/16/2014 1:02:36 PM	R18044
Surr: BFB	96.8	70-130		%REC	1	4/16/2014 1:02:36 PM	R18044

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 11:45:00 AM
Lab ID: 1404472-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/14/2014 8:21:56 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 8:21:56 PM	12625
Surr: DNOP	102	62.7-145		%REC	1	4/14/2014 8:21:56 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Acenaphthylene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Aniline	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Anthracene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Azobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Benzoic acid	ND	20		µg/L	1	4/15/2014 3:42:26 PM	12681
Benzyl alcohol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Carbazole	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4-Chloroaniline	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2-Chlorophenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Chrysene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Dibenzofuran	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Diethyl phthalate	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 11:45:00 AM
Lab ID: 1404472-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/15/2014 3:42:26 PM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/15/2014 3:42:26 PM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/15/2014 3:42:26 PM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Fluoranthene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Fluorene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Hexachloroethane	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Isophorone	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2-Methylphenol	ND	20		µg/L	1	4/15/2014 3:42:26 PM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Naphthalene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2-Nitroaniline	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
3-Nitroaniline	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4-Nitroaniline	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Nitrobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2-Nitrophenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
4-Nitrophenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Pentachlorophenol	ND	20		µg/L	1	4/15/2014 3:42:26 PM	12681
Phenanthrene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Phenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Pyrene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Pyridine	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/15/2014 3:42:26 PM	12681
Surr: 2-Fluorophenol	55.2	12.1-85.8		%REC	1	4/15/2014 3:42:26 PM	12681
Surr: Phenol-d5	42.9	17.7-65.8		%REC	1	4/15/2014 3:42:26 PM	12681
Surr: 2,4,6-Tribromophenol	90.0	26-138		%REC	1	4/15/2014 3:42:26 PM	12681

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 11:45:00 AM
Lab ID: 1404472-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Surr: Nitrobenzene-d5	73.7	47.5-119		%REC	1	4/15/2014 3:42:26 PM	12681
Surr: 2-Fluorobiphenyl	76.3	48.1-106		%REC	1	4/15/2014 3:42:26 PM	12681
Surr: 4-Terphenyl-d14	86.1	44-113		%REC	1	4/15/2014 3:42:26 PM	12681
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	450	10		µg/L	10	4/11/2014 11:49:57 AM	R17948
Toluene	6.7	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Ethylbenzene	65	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Methyl tert-butyl ether (MTBE)	180	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2-Dichloroethane (EDC)	14	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Naphthalene	ND	2.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1-Methylnaphthalene	ND	4.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
2-Methylnaphthalene	ND	4.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Acetone	ND	10		µg/L	1	4/10/2014 9:05:55 PM	R17921
Bromobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Bromodichloromethane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Bromoform	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Bromomethane	ND	3.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
2-Butanone	ND	10		µg/L	1	4/10/2014 9:05:55 PM	R17921
Carbon disulfide	ND	10		µg/L	1	4/10/2014 9:05:55 PM	R17921
Carbon Tetrachloride	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Chlorobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Chloroethane	ND	2.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Chloroform	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Chloromethane	ND	3.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
2-Chlorotoluene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
4-Chlorotoluene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
cis-1,2-DCE	57	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Dibromochloromethane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Dibromomethane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,1-Dichloroethane	200	10		µg/L	10	4/11/2014 11:49:57 AM	R17948

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 11:45:00 AM
Lab ID: 1404472-003
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
1,1-Dichloroethene	88	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2-Dichloropropane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,3-Dichloropropane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
2,2-Dichloropropane	ND	2.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,1-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Hexachlorobutadiene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
2-Hexanone	ND	10		µg/L	1	4/10/2014 9:05:55 PM	R17921
Isopropylbenzene	20	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
4-Isopropyltoluene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
4-Methyl-2-pentanone	ND	10		µg/L	1	4/10/2014 9:05:55 PM	R17921
Methylene Chloride	ND	3.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
n-Butylbenzene	9.1	3.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
n-Propylbenzene	38	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
sec-Butylbenzene	5.0	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Styrene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
tert-Butylbenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Tetrachloroethene (PCE)	1.9	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
trans-1,2-DCE	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,1,1-Trichloroethane	21	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,1,2-Trichloroethane	1.4	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Trichloroethene (TCE)	5.2	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Trichlorofluoromethane	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Vinyl chloride	ND	1.0		µg/L	1	4/10/2014 9:05:55 PM	R17921
Xylenes, Total	2.3	1.5		µg/L	1	4/10/2014 9:05:55 PM	R17921
Surr: 1,2-Dichloroethane-d4	132	70-130	S	%REC	1	4/10/2014 9:05:55 PM	R17921
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	4/10/2014 9:05:55 PM	R17921
Surr: Dibromofluoromethane	110	70-130		%REC	1	4/10/2014 9:05:55 PM	R17921
Surr: Toluene-d8	104	70-130		%REC	1	4/10/2014 9:05:55 PM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	4.2	0.50		mg/L	10	4/16/2014 3:26:21 PM	R18044
Surr: BFB	97.8	70-130		%REC	10	4/16/2014 3:26:21 PM	R18044

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 12:50:00 PM
Lab ID: 1404472-004
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	4/14/2014 8:44:00 PM	12625
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/14/2014 8:44:00 PM	12625
Surr: DNOP	114	62.7-145		%REC	1	4/14/2014 8:44:00 PM	12625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Acenaphthylene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Aniline	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Anthracene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Azobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Benz(a)anthracene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Benzo(a)pyrene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Benzo(b)fluoranthene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Benzo(k)fluoranthene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Benzoic acid	ND	20		µg/L	1	4/15/2014 4:12:07 PM	12681
Benzyl alcohol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Butyl benzyl phthalate	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Carbazole	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4-Chloroaniline	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2-Chloronaphthalene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2-Chlorophenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Chrysene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Di-n-butyl phthalate	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Di-n-octyl phthalate	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Dibenzofuran	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
1,2-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
1,3-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
1,4-Dichlorobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Diethyl phthalate	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Dimethyl phthalate	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 12:50:00 PM
Lab ID: 1404472-004
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dichlorophenol	ND	20		µg/L	1	4/15/2014 4:12:07 PM	12681
2,4-Dimethylphenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/15/2014 4:12:07 PM	12681
2,4-Dinitrophenol	ND	20		µg/L	1	4/15/2014 4:12:07 PM	12681
2,4-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2,6-Dinitrotoluene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Fluoranthene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Fluorene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Hexachlorobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Hexachlorobutadiene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Hexachloroethane	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Isophorone	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
1-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2-Methylnaphthalene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2-Methylphenol	ND	20		µg/L	1	4/15/2014 4:12:07 PM	12681
3+4-Methylphenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
N-Nitrosodimethylamine	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Naphthalene	21	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2-Nitroaniline	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
3-Nitroaniline	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4-Nitroaniline	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Nitrobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2-Nitrophenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
4-Nitrophenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Pentachlorophenol	ND	20		µg/L	1	4/15/2014 4:12:07 PM	12681
Phenanthrene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Phenol	13	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Pyrene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Pyridine	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/15/2014 4:12:07 PM	12681
Surr: 2-Fluorophenol	64.9	12.1-85.8		%REC	1	4/15/2014 4:12:07 PM	12681
Surr: Phenol-d5	49.0	17.7-65.8		%REC	1	4/15/2014 4:12:07 PM	12681
Surr: 2,4,6-Tribromophenol	87.0	26-138		%REC	1	4/15/2014 4:12:07 PM	12681

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 12:50:00 PM
Lab ID: 1404472-004
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Surr: Nitrobenzene-d5	84.9	47.5-119		%REC	1	4/15/2014 4:12:07 PM	12681
Surr: 2-Fluorobiphenyl	87.9	48.1-106		%REC	1	4/15/2014 4:12:07 PM	12681
Surr: 4-Terphenyl-d14	94.1	44-113		%REC	1	4/15/2014 4:12:07 PM	12681
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	1000	20		µg/L	20	4/11/2014 12:20:05 PM	R17948
Toluene	9.2	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Ethylbenzene	130	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Methyl tert-butyl ether (MTBE)	270	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2,4-Trimethylbenzene	9.9	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,3,5-Trimethylbenzene	3.0	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2-Dichloroethane (EDC)	10	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Naphthalene	30	4.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1-Methylnaphthalene	ND	8.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
2-Methylnaphthalene	ND	8.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Acetone	ND	20		µg/L	2	4/10/2014 9:35:59 PM	R17921
Bromobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Bromodichloromethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Bromoform	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Bromomethane	ND	6.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
2-Butanone	ND	20		µg/L	2	4/10/2014 9:35:59 PM	R17921
Carbon disulfide	ND	20		µg/L	2	4/10/2014 9:35:59 PM	R17921
Carbon Tetrachloride	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Chlorobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Chloroethane	ND	4.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Chloroform	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Chloromethane	ND	6.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
2-Chlorotoluene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
4-Chlorotoluene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
cis-1,2-DCE	54	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Dibromochloromethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Dibromomethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2-Dichlorobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,3-Dichlorobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,4-Dichlorobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Dichlorodifluoromethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,1-Dichloroethane	330	20		µg/L	20	4/11/2014 12:20:05 PM	R17948

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Hydrocarbon Seep
Collection Date: 4/8/2014 12:50:00 PM
Lab ID: 1404472-004
Matrix: AQUEOUS
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethene	150	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2-Dichloropropane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,3-Dichloropropane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
2,2-Dichloropropane	ND	4.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,1-Dichloropropene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Hexachlorobutadiene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
2-Hexanone	ND	20		µg/L	2	4/10/2014 9:35:59 PM	R17921
Isopropylbenzene	34	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
4-Isopropyltoluene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
4-Methyl-2-pentanone	ND	20		µg/L	2	4/10/2014 9:35:59 PM	R17921
Methylene Chloride	ND	6.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
n-Butylbenzene	14	6.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
n-Propylbenzene	39	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
sec-Butylbenzene	5.8	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Styrene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
tert-Butylbenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Tetrachloroethene (PCE)	3.3	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
trans-1,2-DCE	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,1,1-Trichloroethane	76	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,1,2-Trichloroethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Trichloroethene (TCE)	30	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Trichlorofluoromethane	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
1,2,3-Trichloropropane	ND	4.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Vinyl chloride	ND	2.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Xylenes, Total	13	3.0		µg/L	2	4/10/2014 9:35:59 PM	R17921
Surr: 1,2-Dichloroethane-d4	128	70-130		%REC	2	4/10/2014 9:35:59 PM	R17921
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	2	4/10/2014 9:35:59 PM	R17921
Surr: Dibromofluoromethane	103	70-130		%REC	2	4/10/2014 9:35:59 PM	R17921
Surr: Toluene-d8	107	70-130		%REC	2	4/10/2014 9:35:59 PM	R17921
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	6.9	1.0		mg/L	20	4/16/2014 3:55:05 PM	R18044
Surr: BFB	98.1	70-130		%REC	20	4/16/2014 3:55:05 PM	R18044

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404472-005
Matrix: TRIP BLANK
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Toluene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Ethylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Naphthalene	ND	2.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1-Methylnaphthalene	ND	4.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
2-Methylnaphthalene	ND	4.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Acetone	ND	10		µg/L	1	4/10/2014 10:06:11 PM	R17921
Bromobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Bromodichloromethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Bromoform	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Bromomethane	ND	3.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
2-Butanone	ND	10		µg/L	1	4/10/2014 10:06:11 PM	R17921
Carbon disulfide	ND	10		µg/L	1	4/10/2014 10:06:11 PM	R17921
Carbon Tetrachloride	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Chlorobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Chloroethane	ND	2.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Chloroform	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Chloromethane	ND	3.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
2-Chlorotoluene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
4-Chlorotoluene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
cis-1,2-DCE	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Dibromochloromethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Dibromomethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,1-Dichloroethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,1-Dichloroethene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2-Dichloropropane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,3-Dichloropropane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
2,2-Dichloropropane	ND	2.0		µg/L	1	4/10/2014 10:06:11 PM	R17921

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Qualifiers:

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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.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1404472-005
Matrix: TRIP BLANK
Received Date: 4/10/2014 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Hexachlorobutadiene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
2-Hexanone	ND	10		µg/L	1	4/10/2014 10:06:11 PM	R17921
Isopropylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
4-Isopropyltoluene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
4-Methyl-2-pentanone	ND	10		µg/L	1	4/10/2014 10:06:11 PM	R17921
Methylene Chloride	ND	3.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
n-Butylbenzene	ND	3.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
n-Propylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
sec-Butylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Styrene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
tert-Butylbenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
trans-1,2-DCE	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Trichlorofluoromethane	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Vinyl chloride	ND	1.0		µg/L	1	4/10/2014 10:06:11 PM	R17921
Xylenes, Total	ND	1.5		µg/L	1	4/10/2014 10:06:11 PM	R17921
Surr: 1,2-Dichloroethane-d4	110	70-130		%REC	1	4/10/2014 10:06:11 PM	R17921
Surr: 4-Bromofluorobenzene	89.8	70-130		%REC	1	4/10/2014 10:06:11 PM	R17921
Surr: Dibromofluoromethane	109	70-130		%REC	1	4/10/2014 10:06:11 PM	R17921
Surr: Toluene-d8	103	70-130		%REC	1	4/10/2014 10:06:11 PM	R17921

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S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12625** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518822** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	62.7	145			

Sample ID **LCS-12625** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518851** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	107	78.6	146			
Surr: DNOP	0.49		0.5000		98.9	62.7	145			

Sample ID **LCSD-12625** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **12625** RunNo: **17956**
Prep Date: **4/9/2014** Analysis Date: **4/14/2014** SeqNo: **518852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	113	78.6	146	5.22	26.5	
Surr: DNOP	0.52		0.5000		104	62.7	145	0	0	

Qualifiers:

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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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R17921**	RunNo: **17921**			
Prep Date:	Analysis Date: **4/10/2014**	SeqNo: **516977**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17921**	RunNo: **17921**
Prep Date:	Analysis Date: **4/10/2014**	SeqNo: **516977** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.7		10.00		76.9	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		88.3	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17921**	RunNo: **17921**
Prep Date:	Analysis Date: **4/10/2014**	SeqNo: **516979** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	96.0	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			

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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R17921** RunNo: **17921**
Prep Date: Analysis Date: **4/10/2014** SeqNo: **516979** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	119	90	143			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	7.6		10.00		76.3	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.2	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.2	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R17948** RunNo: **17948**
Prep Date: Analysis Date: **4/11/2014** SeqNo: **517885** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
1,1-Dichloroethane	ND	1.0								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.6	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.8	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.5	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R17948** RunNo: **17948**
Prep Date: Analysis Date: **4/11/2014** SeqNo: **517887** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	8.0		10.00		79.6	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.8	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18044** RunNo: **18044**
Prep Date: Analysis Date: **4/16/2014** SeqNo: **520592** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Qualifiers:

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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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R18044**	RunNo: **18044**			
Prep Date:	Analysis Date: **4/16/2014**	SeqNo: **520614**	Units: **%REC**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		99.9	70	130			
Surr: Toluene-d8	9.5		10.00		94.5	70	130			

Qualifiers:

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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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

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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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12681**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12681**	RunNo: **17998**			
Prep Date: **4/12/2014**	Analysis Date: **4/15/2014**	SeqNo: **519465**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		56.2	12.1	85.8			
Surr: Phenol-d5	120		200.0		59.6	17.7	65.8			
Surr: 2,4,6-Tribromophenol	110		200.0		57.1	26	138			
Surr: Nitrobenzene-d5	58		100.0		58.4	47.5	119			
Surr: 2-Fluorobiphenyl	63		100.0		62.6	48.1	106			
Surr: 4-Terphenyl-d14	63		100.0		63.1	44	113			

Qualifiers:

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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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12681** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12681** RunNo: **17998**
Prep Date: **4/12/2014** Analysis Date: **4/15/2014** SeqNo: **519466** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	60	10	100.0	0	60.4	50.3	109			
4-Chloro-3-methylphenol	130	10	200.0	0	63.4	51.2	113			
2-Chlorophenol	130	10	200.0	0	63.6	48.5	104			
1,4-Dichlorobenzene	66	10	100.0	0	65.9	39.5	106			
2,4-Dinitrotoluene	51	10	100.0	0	50.8	45.4	107			
N-Nitrosodi-n-propylamine	61	10	100.0	0	61.1	50.4	119			
4-Nitrophenol	110	10	200.0	0	54.7	15.5	62.2			
Pentachlorophenol	100	20	200.0	0	51.0	23.5	93.5			
Phenol	130	10	200.0	0	63.6	26.8	65.6			
Pyrene	73	10	100.0	0	73.0	54.4	108			
1,2,4-Trichlorobenzene	63	10	100.0	0	63.2	39.9	106			
Surr: 2-Fluorophenol	130		200.0		63.2	12.1	85.8			
Surr: Phenol-d5	130		200.0		66.8	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	150		200.0		73.0	26	138			
Surr: Nitrobenzene-d5	68		100.0		67.6	47.5	119			
Surr: 2-Fluorobiphenyl	69		100.0		69.5	48.1	106			
Surr: 4-Terphenyl-d14	78		100.0		77.5	44	113			

Sample ID **mb-12707** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								

Qualifiers:

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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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12707**	RunNo: **18041**			
Prep Date: **4/15/2014**	Analysis Date: **4/16/2014**	SeqNo: **520513**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								

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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12707** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520513** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		55.1	12.1	85.8			
Surr: Phenol-d5	84		200.0		42.2	17.7	65.8			
Surr: 2,4,6-Tribromophenol	190		200.0		93.5	26	138			
Surr: Nitrobenzene-d5	71		100.0		71.4	47.5	119			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	48.1	106			
Surr: 4-Terphenyl-d14	90		100.0		89.7	44	113			

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.5	50.3	109			
4-Chloro-3-methylphenol	150	10	200.0	0	74.8	51.2	113			
2-Chlorophenol	140	10	200.0	0	69.9	48.5	104			
1,4-Dichlorobenzene	69	10	100.0	0	68.8	39.5	106			
2,4-Dinitrotoluene	71	10	100.0	0	71.3	45.4	107			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.7	50.4	119			
4-Nitrophenol	160	10	200.0	0	80.4	15.5	62.2			S
Pentachlorophenol	150	20	200.0	0	74.9	23.5	93.5			
Phenol	150	10	200.0	0	73.6	26.8	65.6			S
Pyrene	79	10	100.0	0	79.4	54.4	108			
1,2,4-Trichlorobenzene	68	10	100.0	0	67.8	39.9	106			

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#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12707** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520514** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	140		200.0		71.1	12.1	85.8			
Surr: Phenol-d5	140		200.0		71.9	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	170		200.0		85.2	26	138			
Surr: Nitrobenzene-d5	73		100.0		72.7	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	48.1	106			
Surr: 4-Terphenyl-d14	81		100.0		80.6	44	113			

Sample ID **lcsd-12707** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **12707** RunNo: **18041**
Prep Date: **4/15/2014** Analysis Date: **4/16/2014** SeqNo: **520515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	66	10	100.0	0	66.3	50.3	109	7.61	27.2	
4-Chloro-3-methylphenol	140	10	200.0	0	70.3	51.2	113	6.31	25.9	
2-Chlorophenol	130	10	200.0	0	67.2	48.5	104	4.01	22.5	
1,4-Dichlorobenzene	67	10	100.0	0	67.2	39.5	106	2.32	24.6	
2,4-Dinitrotoluene	59	10	100.0	0	59.2	45.4	107	18.5	25.3	
N-Nitrosodi-n-propylamine	66	10	100.0	0	66.4	50.4	119	7.62	23.6	
4-Nitrophenol	140	10	200.0	0	67.6	15.5	62.2	17.2	34.7	S
Pentachlorophenol	130	20	200.0	0	63.4	23.5	93.5	16.6	32.8	
Phenol	140	10	200.0	0	70.0	26.8	65.6	5.02	25.5	S
Pyrene	73	10	100.0	0	73.3	54.4	108	7.94	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	65.5	39.9	106	3.39	25.9	
Surr: 2-Fluorophenol	130		200.0		65.5	12.1	85.8	0	0	
Surr: Phenol-d5	130		200.0		67.0	17.7	65.8	0	0	S
Surr: 2,4,6-Tribromophenol	160		200.0		80.2	26	138	0	0	
Surr: Nitrobenzene-d5	65		100.0		64.7	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.9	48.1	106	0	0	
Surr: 4-Terphenyl-d14	75		100.0		75.1	44	113	0	0	

Qualifiers:

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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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404472**
24-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**5mL rb**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520568** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		96.0	70	130			

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R18044**	RunNo:	**18044**
Prep Date:		Analysis Date:	**4/16/2014**	SeqNo:	**520570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	85.2	80	120			
Surr: BFB	9.9		10.00		98.7	70	130			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1404472 RcptNo: 1

Received by/date: AM 04/10/14

Logged By: **Michelle Garcia** 4/10/2014 8:45:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 4/10/2014 9:17:36 AM Michelle Garcia

Reviewed By: 04/10/14

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? 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.8	Good	Yes			

Chain of Custody Record

Client: WESTERN REFINING SW GALLUP REFINERY

Mailing Address: 92 GIANT CROSSING RD GALLUP, NM 87301

Phone #: 505-722-0231

email or Fax#: CHERYL.JOHNSON@WNR.COM

QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ NELAP ☐ Other _____

☐ EDD (Type) _____

☑ Standard ☐ Rush _____

Project Name: HYDROCARBON SEEP

Project #:

Project Manager: CHERYL JOHNSON

Sampler: TRACY PAYNE 361.438.1668

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404472	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
4.8.14	0945	GW	MKTF-27	40 mL VOA / 1 L AMBER	6 HCL / NEAT	-001			✓							✓	✓					
	1050		MKTF-26			-002			✓							✓	✓					
	1145		MKTF-24			-003			✓							✓	✓					
	1250		MKTF-25			-004			✓							✓	✓					
—	—	W	TRIP BLANK	2 40 mL VOA	HCL	-005										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
4.9.14	0645	[signature]	[signature]	04/10/14	0845
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 22, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1404247

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/5/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1404247**
Date Reported: **4/22/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB24
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 2:20:00 PM
Lab ID: 1404247-001
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/7/2014 1:35:10 PM	12556
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/7/2014 1:35:10 PM	12556
Surr: DNOP	94.0	62.7-145		%REC	1	4/7/2014 1:35:10 PM	12556
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.4	0.50		mg/L	10	4/9/2014 12:11:25 PM	R17895
Surr: BFB	84.0	80.4-118		%REC	10	4/9/2014 12:11:25 PM	R17895
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.22	0.10		mg/L	1	4/7/2014 12:42:01 PM	R17847
Chloride	530	25	*	mg/L	50	4/11/2014 8:56:35 PM	R17952
Bromide	0.91	0.10		mg/L	1	4/7/2014 12:42:01 PM	R17847
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	4/7/2014 12:42:01 PM	R17847
Sulfate	560	10	*	mg/L	20	4/7/2014 1:19:15 PM	R17847
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/7/2014 4:12:57 PM	R17847
EPA METHOD 200.7: METALS						Analyst:	**JLF**
Barium	0.16	0.0020		mg/L	1	4/15/2014 5:16:57 PM	12712
Cadmium	ND	0.0020		mg/L	1	4/15/2014 5:16:57 PM	12712
Calcium	190	5.0		mg/L	5	4/15/2014 5:18:30 PM	12712
Chromium	0.0071	0.0060		mg/L	1	4/15/2014 5:16:57 PM	12712
Copper	ND	0.0060		mg/L	1	4/15/2014 5:16:57 PM	12712
Iron	5.9	0.20	*	mg/L	10	4/15/2014 5:49:06 PM	12712
Magnesium	37	1.0		mg/L	1	4/15/2014 5:16:57 PM	12712
Manganese	0.71	0.0020	*	mg/L	1	4/15/2014 5:16:57 PM	12712
Potassium	5.0	1.0		mg/L	1	4/15/2014 5:16:57 PM	12712
Silver	ND	0.0050		mg/L	1	4/15/2014 5:16:57 PM	12712
Sodium	520	10		mg/L	10	4/15/2014 5:49:06 PM	12712
Zinc	0.022	0.010		mg/L	1	4/15/2014 5:16:57 PM	12712
EPA 200.8: METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	4/16/2014 12:48:23 PM	12712
Lead	0.0025	0.0010		mg/L	1	4/16/2014 11:54:41 AM	12712
Selenium	ND	0.0050		mg/L	5	4/16/2014 12:48:23 PM	12712
Uranium	0.014	0.0010		mg/L	1	4/16/2014 11:54:41 AM	12712
EPA METHOD 245.1: MERCURY						Analyst:	**JML**
Mercury	ND	0.00020		mg/L	1	4/8/2014 6:04:42 PM	12601
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Acenaphthylene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608

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

Qualifiers:

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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.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB24
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 2:20:00 PM
Lab ID: 1404247-001
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Aniline	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Anthracene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Azobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Benz(a)anthracene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Benzo(a)pyrene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Benzo(b)fluoranthene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Benzo(k)fluoranthene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Benzoic acid	ND	20		µg/L	1	4/10/2014 1:48:17 PM	12608
Benzyl alcohol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Butyl benzyl phthalate	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Carbazole	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4-Chloroaniline	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2-Chloronaphthalene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2-Chlorophenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Chrysene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Di-n-butyl phthalate	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Di-n-octyl phthalate	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Dibenzofuran	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
1,2-Dichlorobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
1,3-Dichlorobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
1,4-Dichlorobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Diethyl phthalate	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Dimethyl phthalate	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2,4-Dichlorophenol	ND	20		µg/L	1	4/10/2014 1:48:17 PM	12608
2,4-Dimethylphenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/10/2014 1:48:17 PM	12608
2,4-Dinitrophenol	ND	20		µg/L	1	4/10/2014 1:48:17 PM	12608
2,4-Dinitrotoluene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2,6-Dinitrotoluene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB24
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 2:20:00 PM
Lab ID: 1404247-001
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Fluoranthene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Fluorene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Hexachlorobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Hexachlorobutadiene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Hexachloroethane	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Isophorone	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
1-Methylnaphthalene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2-Methylnaphthalene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2-Methylphenol	ND	20		µg/L	1	4/10/2014 1:48:17 PM	12608
3+4-Methylphenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
N-Nitrosodimethylamine	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Naphthalene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2-Nitroaniline	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
3-Nitroaniline	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4-Nitroaniline	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Nitrobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2-Nitrophenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
4-Nitrophenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Pentachlorophenol	ND	20		µg/L	1	4/10/2014 1:48:17 PM	12608
Phenanthrene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Phenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Pyrene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Pyridine	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/10/2014 1:48:17 PM	12608
Surr: 2-Fluorophenol	54.8	22.7-98		%REC	1	4/10/2014 1:48:17 PM	12608
Surr: Phenol-d5	43.9	23.4-74.9		%REC	1	4/10/2014 1:48:17 PM	12608
Surr: 2,4,6-Tribromophenol	74.5	23.3-111		%REC	1	4/10/2014 1:48:17 PM	12608
Surr: Nitrobenzene-d5	73.8	36.8-111		%REC	1	4/10/2014 1:48:17 PM	12608
Surr: 2-Fluorobiphenyl	79.5	38.3-110		%REC	1	4/10/2014 1:48:17 PM	12608
Surr: 4-Terphenyl-d14	68.0	52.1-116		%REC	1	4/10/2014 1:48:17 PM	12608
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	430	10		µg/L	10	4/8/2014 12:49:04 AM	R17839
Toluene	3.0	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB24
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 2:20:00 PM
Lab ID: 1404247-001
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Ethylbenzene	21	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Methyl tert-butyl ether (MTBE)	270	10		µg/L	10	4/8/2014 12:49:04 AM	R17839
1,2,4-Trimethylbenzene	14	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,3,5-Trimethylbenzene	6.2	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2-Dichloroethane (EDC)	9.4	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Naphthalene	7.4	2.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Acetone	ND	10		µg/L	1	4/8/2014 2:06:41 PM	R17865
Bromobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Bromoform	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Bromomethane	ND	3.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
2-Butanone	ND	10		µg/L	1	4/8/2014 2:06:41 PM	R17865
Carbon disulfide	ND	10		µg/L	1	4/8/2014 2:06:41 PM	R17865
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Chlorobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Chloroethane	ND	2.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Chloroform	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Chloromethane	ND	3.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Dibromomethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1-Dichloroethane	7.0	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1-Dichloroethene	4.3	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: SB24
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 2:20:00 PM
Lab ID: 1404247-001
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
2-Hexanone	ND	10		µg/L	1	4/8/2014 2:06:41 PM	R17865
Isopropylbenzene	2.7	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2014 2:06:41 PM	R17865
Methylene Chloride	ND	3.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
n-Propylbenzene	2.7	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Styrene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Vinyl chloride	ND	1.0		µg/L	1	4/8/2014 2:06:41 PM	R17865
Xylenes, Total	39	1.5		µg/L	1	4/8/2014 2:06:41 PM	R17865
Surr: 1,2-Dichloroethane-d4	115	70-130		%REC	1	4/8/2014 2:06:41 PM	R17865
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	4/8/2014 2:06:41 PM	R17865
Surr: Dibromofluoromethane	104	70-130		%REC	1	4/8/2014 2:06:41 PM	R17865
Surr: Toluene-d8	94.0	70-130		%REC	1	4/8/2014 2:06:41 PM	R17865

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB27
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 4:00:00 PM
Lab ID: 1404247-002
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	3.6	1.0		mg/L	1	4/7/2014 1:57:08 PM	12556
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/7/2014 1:57:08 PM	12556
Surr: DNOP	91.3	62.7-145		%REC	1	4/7/2014 1:57:08 PM	12556
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	34	2.5		mg/L	50	4/9/2014 12:41:41 PM	R17895
Surr: BFB	98.6	80.4-118		%REC	50	4/9/2014 12:41:41 PM	R17895
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.29	0.10		mg/L	1	4/7/2014 1:31:40 PM	R17847
Chloride	540	25	*	mg/L	50	4/11/2014 9:08:59 PM	R17952
Bromide	0.10	0.10		mg/L	1	4/7/2014 1:31:40 PM	R17847
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	4/7/2014 1:31:40 PM	R17847
Sulfate	8.0	0.50		mg/L	1	4/7/2014 1:31:40 PM	R17847
Nitrate+Nitrite as N	ND	1.0		mg/L	5	4/7/2014 4:25:22 PM	R17847
EPA METHOD 200.7: METALS						Analyst:	**JLF**
Barium	2.1	0.010	*	mg/L	5	4/15/2014 5:27:23 PM	12712
Cadmium	ND	0.0020		mg/L	1	4/15/2014 5:25:40 PM	12712
Calcium	140	5.0		mg/L	5	4/15/2014 5:27:23 PM	12712
Chromium	ND	0.0060		mg/L	1	4/15/2014 5:25:40 PM	12712
Copper	0.011	0.0060		mg/L	1	4/15/2014 5:25:40 PM	12712
Iron	9.2	0.40	*	mg/L	20	4/15/2014 5:51:05 PM	12712
Magnesium	26	1.0		mg/L	1	4/15/2014 5:25:40 PM	12712
Manganese	2.8	0.010	*	mg/L	5	4/15/2014 5:27:23 PM	12712
Potassium	3.2	1.0		mg/L	1	4/15/2014 5:25:40 PM	12712
Silver	ND	0.0050		mg/L	1	4/15/2014 5:25:40 PM	12712
Sodium	570	20		mg/L	20	4/15/2014 5:51:05 PM	12712
Zinc	0.024	0.010		mg/L	1	4/15/2014 5:25:40 PM	12712
EPA 200.8: METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	4/16/2014 12:53:41 PM	12712
Lead	0.016	0.0010	*	mg/L	1	4/16/2014 11:59:59 AM	12712
Selenium	ND	0.0050		mg/L	5	4/16/2014 12:53:41 PM	12712
Uranium	0.0061	0.0010		mg/L	1	4/16/2014 11:59:59 AM	12712
EPA METHOD 245.1: MERCURY						Analyst:	**JML**
Mercury	ND	0.00020		mg/L	1	4/8/2014 6:06:26 PM	12601
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Acenaphthylene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB27
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 4:00:00 PM
Lab ID: 1404247-002
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Aniline	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Anthracene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Azobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Benz(a)anthracene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Benzo(a)pyrene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Benzo(b)fluoranthene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Benzo(k)fluoranthene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Benzoic acid	ND	20		µg/L	1	4/9/2014 12:42:02 PM	12608
Benzyl alcohol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Bis(2-chloroethyl)ether	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Butyl benzyl phthalate	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Carbazole	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4-Chloro-3-methylphenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4-Chloroaniline	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2-Chloronaphthalene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2-Chlorophenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Chrysene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Di-n-butyl phthalate	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Di-n-octyl phthalate	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Dibenzofuran	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
1,2-Dichlorobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
1,3-Dichlorobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
1,4-Dichlorobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
3,3´-Dichlorobenzidine	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Diethyl phthalate	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Dimethyl phthalate	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2,4-Dichlorophenol	ND	20		µg/L	1	4/9/2014 12:42:02 PM	12608
2,4-Dimethylphenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	4/9/2014 12:42:02 PM	12608
2,4-Dinitrophenol	ND	20		µg/L	1	4/9/2014 12:42:02 PM	12608
2,4-Dinitrotoluene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2,6-Dinitrotoluene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608

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Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Fluoranthene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Fluorene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Hexachlorobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Hexachlorobutadiene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Hexachloroethane	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Isophorone	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
1-Methylnaphthalene	32	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2-Methylnaphthalene	59	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2-Methylphenol	ND	20		µg/L	1	4/9/2014 12:42:02 PM	12608
3+4-Methylphenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
N-Nitrosodimethylamine	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Naphthalene	220	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2-Nitroaniline	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
3-Nitroaniline	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4-Nitroaniline	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Nitrobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2-Nitrophenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
4-Nitrophenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Pentachlorophenol	ND	20		µg/L	1	4/9/2014 12:42:02 PM	12608
Phenanthrene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Phenol	11	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Pyrene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Pyridine	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
2,4,6-Trichlorophenol	ND	10		µg/L	1	4/9/2014 12:42:02 PM	12608
Surr: 2-Fluorophenol	67.8	22.7-98		%REC	1	4/9/2014 12:42:02 PM	12608
Surr: Phenol-d5	38.9	23.4-74.9		%REC	1	4/9/2014 12:42:02 PM	12608
Surr: 2,4,6-Tribromophenol	84.2	23.3-111		%REC	1	4/9/2014 12:42:02 PM	12608
Surr: Nitrobenzene-d5	94.5	36.8-111		%REC	1	4/9/2014 12:42:02 PM	12608
Surr: 2-Fluorobiphenyl	90.2	38.3-110		%REC	1	4/9/2014 12:42:02 PM	12608
Surr: 4-Terphenyl-d14	79.6	52.1-116		%REC	1	4/9/2014 12:42:02 PM	12608
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	2200	100		µg/L	100	4/8/2014 3:08:12 PM	R17865
Toluene	170	10		µg/L	10	4/8/2014 1:50:45 AM	R17839

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB27
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 4:00:00 PM
Lab ID: 1404247-002
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Ethylbenzene	1100	100		µg/L	100	4/8/2014 3:08:12 PM	R17865
Methyl tert-butyl ether (MTBE)	260	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2,4-Trimethylbenzene	1100	100		µg/L	100	4/8/2014 3:08:12 PM	R17865
1,3,5-Trimethylbenzene	300	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2-Dichloroethane (EDC)	12	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Naphthalene	300	20		µg/L	10	4/8/2014 1:50:45 AM	R17839
1-Methylnaphthalene	ND	40		µg/L	10	4/8/2014 1:50:45 AM	R17839
2-Methylnaphthalene	65	40		µg/L	10	4/8/2014 1:50:45 AM	R17839
Acetone	ND	100		µg/L	10	4/8/2014 1:50:45 AM	R17839
Bromobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Bromodichloromethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Bromoform	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Bromomethane	ND	30		µg/L	10	4/8/2014 1:50:45 AM	R17839
2-Butanone	ND	100		µg/L	10	4/8/2014 1:50:45 AM	R17839
Carbon disulfide	ND	100		µg/L	10	4/8/2014 1:50:45 AM	R17839
Carbon Tetrachloride	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Chlorobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Chloroethane	ND	20		µg/L	10	4/8/2014 1:50:45 AM	R17839
Chloroform	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Chloromethane	ND	30		µg/L	10	4/8/2014 1:50:45 AM	R17839
2-Chlorotoluene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
4-Chlorotoluene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
cis-1,2-DCE	81	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/8/2014 1:50:45 AM	R17839
Dibromochloromethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Dibromomethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2-Dichlorobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,3-Dichlorobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,4-Dichlorobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Dichlorodifluoromethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1-Dichloroethane	350	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1-Dichloroethene	220	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2-Dichloropropane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,3-Dichloropropane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
2,2-Dichloropropane	ND	20		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1-Dichloropropene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Hexachlorobutadiene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839

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

Qualifiers:

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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.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: SB27
Project: Hydrocarbon Seep
Collection Date: 4/3/2014 4:00:00 PM
Lab ID: 1404247-002
Matrix: AQUEOUS
Received Date: 4/5/2014 8:38:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
2-Hexanone	ND	100		µg/L	10	4/8/2014 1:50:45 AM	R17839
Isopropylbenzene	46	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
4-Isopropyltoluene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
4-Methyl-2-pentanone	ND	100		µg/L	10	4/8/2014 1:50:45 AM	R17839
Methylene Chloride	ND	30		µg/L	10	4/8/2014 1:50:45 AM	R17839
n-Butylbenzene	ND	30		µg/L	10	4/8/2014 1:50:45 AM	R17839
n-Propylbenzene	180	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
sec-Butylbenzene	12	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Styrene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
tert-Butylbenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/8/2014 1:50:45 AM	R17839
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
trans-1,2-DCE	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1,1-Trichloroethane	170	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,1,2-Trichloroethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Trichloroethene (TCE)	37	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Trichlorofluoromethane	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
1,2,3-Trichloropropane	ND	20		µg/L	10	4/8/2014 1:50:45 AM	R17839
Vinyl chloride	ND	10		µg/L	10	4/8/2014 1:50:45 AM	R17839
Xylenes, Total	4100	150		µg/L	100	4/8/2014 3:08:12 PM	R17865
Surr: 1,2-Dichloroethane-d4	129	70-130		%REC	10	4/8/2014 1:50:45 AM	R17839
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	10	4/8/2014 1:50:45 AM	R17839
Surr: Dibromofluoromethane	101	70-130		%REC	10	4/8/2014 1:50:45 AM	R17839
Surr: Toluene-d8	100	70-130		%REC	10	4/8/2014 1:50:45 AM	R17839

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

Qualifiers:

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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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB-12712** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **12712** RunNo: **18008**
Prep Date: **4/15/2014** Analysis Date: **4/15/2014** SeqNo: **519645** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS-12712** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **12712** RunNo: **18008**
Prep Date: **4/15/2014** Analysis Date: **4/15/2014** SeqNo: **519646** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.9	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.2	85	115			
Calcium	49	1.0	50.00	0	97.5	85	115			
Chromium	0.49	0.0060	0.5000	0	98.4	85	115			
Copper	0.49	0.0060	0.5000	0	98.1	85	115			
Iron	0.50	0.020	0.5000	0	99.7	85	115			
Magnesium	49	1.0	50.00	0	97.8	85	115			
Manganese	0.48	0.0020	0.5000	0	96.4	85	115			
Potassium	47	1.0	50.00	0	94.5	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Sodium	48	1.0	50.00	0	96.3	85	115			
Zinc	0.49	0.010	0.5000	0	98.8	85	115			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**LLLCS-12712**	SampType:	**LCSLL**	TestCode:	**EPA 200.8: Metals**		
Client ID:	**BatchQC**	Batch ID:	**12712**	RunNo:	**18024**		
Prep Date:	**4/15/2014**	Analysis Date:	**4/16/2014**	SeqNo:	**520212**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.5	85	115			
Lead	0.023	0.0010	0.02500	0	93.0	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.023	0.0010	0.02500	0	92.4	85	115			

Sample ID	**MB-12712**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Metals**		
Client ID:	**PBW**	Batch ID:	**12712**	RunNo:	**18024**		
Prep Date:	**4/15/2014**	Analysis Date:	**4/16/2014**	SeqNo:	**520213**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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.
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**MB-12601**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**12601**	RunNo:	**17860**
Prep Date:	**4/8/2014**	Analysis Date:	**4/8/2014**	SeqNo:	**515020** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-12601**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**12601**	RunNo:	**17860**
Prep Date:	**4/8/2014**	Analysis Date:	**4/8/2014**	SeqNo:	**515021** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	105	80	120			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R17847** RunNo: **17847**
Prep Date: Analysis Date: **4/7/2014** SeqNo: **514596** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R17847** RunNo: **17847**
Prep Date: Analysis Date: **4/7/2014** SeqNo: **514597** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	93.2	90	110			
Bromide	2.4	0.10	2.500	0	94.0	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.5	90	110			
Sulfate	9.4	0.50	10.00	0	94.4	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	94.9	90	110			

Sample ID **1404247-001EMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **SB24** Batch ID: **R17847** RunNo: **17847**
Prep Date: Analysis Date: **4/7/2014** SeqNo: **514599** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.69	0.10	0.5000	0.2200	94.7	76.4	109			
Bromide	3.2	0.10	2.500	0.9120	90.6	85.9	111			

Sample ID **1404247-001EMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **SB24** Batch ID: **R17847** RunNo: **17847**
Prep Date: Analysis Date: **4/7/2014** SeqNo: **514600** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.70	0.10	0.5000	0.2200	96.1	76.4	109	1.03	20	
Bromide	3.2	0.10	2.500	0.9120	90.3	85.9	111	0.258	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R17952** RunNo: **17952**
Prep Date: Analysis Date: **4/11/2014** SeqNo: **518004** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Qualifiers:

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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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**			
Client ID: **LCSW**	Batch ID: **R17952**	RunNo: **17952**			
Prep Date:	Analysis Date: **4/11/2014**	SeqNo: **518005**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.4	90	110			

Qualifiers:

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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.
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**MB-12556**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**PBW**	Batch ID:	**12556**	RunNo:	**17817**					
Prep Date:	**4/7/2014**	Analysis Date:	**4/7/2014**	SeqNo:	**513828**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.83		1.000		83.2	62.7	145			

Sample ID	**LCS-12556**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**LCSW**	Batch ID:	**12556**	RunNo:	**17817**					
Prep Date:	**4/7/2014**	Analysis Date:	**4/7/2014**	SeqNo:	**513829**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.6	1.0	5.000	0	92.1	78.6	146			
Surr: DNOP	0.40		0.5000		79.3	62.7	145			

Sample ID	**LCSD-12556**	SampType:	**LCSD**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**LCSS02**	Batch ID:	**12556**	RunNo:	**17817**					
Prep Date:	**4/7/2014**	Analysis Date:	**4/7/2014**	SeqNo:	**513830**	Units:	**mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	100	78.6	146	8.39	26.5	
Surr: DNOP	0.43		0.5000		86.3	62.7	145	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.
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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R17895** RunNo: **17895**
Prep Date: Analysis Date: **4/9/2014** SeqNo: **516157** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		99.7	80.4	118			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R17895** RunNo: **17895**
Prep Date: Analysis Date: **4/9/2014** SeqNo: **516158** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.53	0.050	0.5000	0	106	80	120			
Surr: BFB	21		20.00		105	80.4	118			

Sample ID **1404247-001BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB24** Batch ID: **R17895** RunNo: **17895**
Prep Date: Analysis Date: **4/9/2014** SeqNo: **516160** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	6.4	0.50	5.000	1.436	99.7	79	121			
Surr: BFB	210		200.0		104	80.4	118			

Sample ID **1404247-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB24** Batch ID: **R17895** RunNo: **17895**
Prep Date: Analysis Date: **4/9/2014** SeqNo: **516161** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	6.2	0.50	5.000	1.436	95.0	79	121	3.68	20	
Surr: BFB	220		200.0		112	80.4	118	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.
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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R17839**	RunNo: **17839**			
Prep Date:	Analysis Date: **4/7/2014**	SeqNo: **514407**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

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.
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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17839**	RunNo: **17839**
Prep Date:	Analysis Date: **4/7/2014**	SeqNo: **514407** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		89.4	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17839**	RunNo: **17839**
Prep Date:	Analysis Date: **4/7/2014**	SeqNo: **514409** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	18	1.0	20.00	0	91.6	80	120			
Chlorobenzene	19	1.0	20.00	0	93.0	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	117	90	143			
Trichloroethene (TCE)	18	1.0	20.00	0	88.8	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17839**	RunNo: **17839**
Prep Date:	Analysis Date: **4/7/2014**	SeqNo: **514409** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.0		10.00		89.8	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.4	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17865**	RunNo: **17865**
Prep Date:	Analysis Date: **4/8/2014**	SeqNo: **515203** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								

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.
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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R17865**	RunNo: **17865**	
Prep Date:	Analysis Date: **4/8/2014**	SeqNo: **515203**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		109	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		87.1	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.8	70	130			
Surr: Toluene-d8	9.4		10.00		94.4	70	130			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R17865**	RunNo: **17865**			
Prep Date:	Analysis Date: **4/8/2014**	SeqNo: **515205**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	18	1.0	20.00	0	89.1	80	120			
Chlorobenzene	18	1.0	20.00	0	90.6	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	90	143			
Trichloroethene (TCE)	20	1.0	20.00	0	99.1	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		88.0	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.3	70	130			
Surr: Toluene-d8	9.4		10.00		93.5	70	130			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12608**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12608**	RunNo: **17893**			
Prep Date: **4/9/2014**	Analysis Date: **4/9/2014**	SeqNo: **516043**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-12608**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **12608**	RunNo: **17893**			
Prep Date: **4/9/2014**	Analysis Date: **4/9/2014**	SeqNo: **516043**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	79		200.0		39.5	22.7	98			
Surr: Phenol-d5	79		200.0		39.3	23.4	74.9			
Surr: 2,4,6-Tribromophenol	120		200.0		58.1	23.3	111			
Surr: Nitrobenzene-d5	78		100.0		78.2	36.8	111			
Surr: 2-Fluorobiphenyl	75		100.0		74.7	38.3	110			
Surr: 4-Terphenyl-d14	78		100.0		77.6	52.1	116			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-12608** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **12608** RunNo: **17893**
Prep Date: **4/9/2014** Analysis Date: **4/9/2014** SeqNo: **516044** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	66	10	100.0	0	66.0	50.3	109			
4-Chloro-3-methylphenol	160	10	200.0	0	81.9	51.2	113			
2-Chlorophenol	150	10	200.0	0	73.4	48.5	104			
1,4-Dichlorobenzene	68	10	100.0	0	67.7	39.5	106			
2,4-Dinitrotoluene	64	10	100.0	0	64.3	45.4	107			
N-Nitrosodi-n-propylamine	80	10	100.0	0	79.5	50.4	119			
4-Nitrophenol	59	10	200.0	0	29.6	15.5	62.2			
Pentachlorophenol	99	20	200.0	0	49.7	23.5	93.5			
Phenol	92	10	200.0	0	45.8	26.8	65.6			
Pyrene	110	10	100.0	0	111	54.4	108			S
1,2,4-Trichlorobenzene	79	10	100.0	0	78.5	39.9	106			
Surr: 2-Fluorophenol	110		200.0		57.1	22.7	98			
Surr: Phenol-d5	97		200.0		48.7	23.4	74.9			
Surr: 2,4,6-Tribromophenol	98		200.0		48.8	23.3	111			
Surr: Nitrobenzene-d5	80		100.0		79.7	36.8	111			
Surr: 2-Fluorobiphenyl	70		100.0		70.4	38.3	110			
Surr: 4-Terphenyl-d14	84		100.0		83.6	52.1	116			

Sample ID **1404247-002dms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SB27** Batch ID: **12608** RunNo: **17893**
Prep Date: **4/9/2014** Analysis Date: **4/9/2014** SeqNo: **516045** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	84	10	100.0	0	84.1	52.5	94.5			
4-Chloro-3-methylphenol	170	10	200.0	0	83.4	45	103			
2-Chlorophenol	150	10	200.0	0	77.3	32.3	101			
1,4-Dichlorobenzene	79	10	100.0	0	78.6	34.5	97.5			
2,4-Dinitrotoluene	76	10	100.0	0	76.3	20.1	123			
N-Nitrosodi-n-propylamine	86	10	100.0	0	85.9	26.9	131			
4-Nitrophenol	56	10	200.0	0	28.2	11.6	55.4			
Pentachlorophenol	64	20	200.0	0	31.9	17.6	88.9			
Phenol	83	10	200.0	10.90	36.1	18.4	66.5			
Pyrene	92	10	100.0	0	91.6	43.1	111			
1,2,4-Trichlorobenzene	81	10	100.0	0	80.6	38.8	95.6			
Surr: 2-Fluorophenol	100		200.0		52.1	22.7	98			
Surr: Phenol-d5	69		200.0		34.5	23.4	74.9			
Surr: 2,4,6-Tribromophenol	160		200.0		79.2	23.3	111			
Surr: Nitrobenzene-d5	74		100.0		74.1	36.8	111			
Surr: 2-Fluorobiphenyl	86		100.0		85.9	38.3	110			

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#: **1404247**
22-Apr-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **1404247-002dms** SampType: **MS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SB27** Batch ID: **12608** RunNo: **17893**
Prep Date: **4/9/2014** Analysis Date: **4/9/2014** SeqNo: **516045** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	89		100.0		89.1	52.1	116			

Sample ID **1404247-002dmsd** SampType: **MSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **SB27** Batch ID: **12608** RunNo: **17893**
Prep Date: **4/9/2014** Analysis Date: **4/9/2014** SeqNo: **516046** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	71	10	100.0	0	70.7	52.5	94.5	17.3	20	
4-Chloro-3-methylphenol	160	10	200.0	0	82.4	45	103	1.19	20	
2-Chlorophenol	150	10	200.0	0	73.8	32.3	101	4.63	20	
1,4-Dichlorobenzene	75	10	100.0	0	75.3	34.5	97.5	4.29	20	
2,4-Dinitrotoluene	74	10	100.0	0	73.6	20.1	123	3.50	20	
N-Nitrosodi-n-propylamine	84	10	100.0	0	83.5	26.9	131	2.79	20	
4-Nitrophenol	68	10	200.0	0	34.2	11.6	55.4	19.2	20	
Pentachlorophenol	130	20	200.0	0	63.7	17.6	88.9	66.6	20	R
Phenol	78	10	200.0	10.90	33.4	18.4	66.5	6.89	20	
Pyrene	100	10	100.0	0	100	43.1	111	8.87	20	
1,2,4-Trichlorobenzene	77	10	100.0	0	76.6	38.8	95.6	5.12	20	
Surr: 2-Fluorophenol	96		200.0		48.2	22.7	98	0	0	
Surr: Phenol-d5	63		200.0		31.6	23.4	74.9	0	0	
Surr: 2,4,6-Tribromophenol	160		200.0		79.4	23.3	111	0	0	
Surr: Nitrobenzene-d5	67		100.0		66.8	36.8	111	0	0	
Surr: 2-Fluorobiphenyl	72		100.0		72.3	38.3	110	0	0	
Surr: 4-Terphenyl-d14	73		100.0		72.8	52.1	116	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1404247** RcptNo: **1**

Received by/date: AF 04/05/14

Logged By: **Lindsay Mangin** **4/5/2014 8:38:00 AM**

Completed By: **Lindsay Mangin** **4/7/2014 7:18:00 AM**

Reviewed By: IO 04/07/14

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? 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.2	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: 92 GIANT CROSSING ROAD
GALLUP, NM 87301
Phone #: 505-722-0231
email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation ☐ NELAP ☐ Other ____
☐ EDD (Type) ____

Turn-Around Time: ☑ Standard ☐ Rush ____
Project Name: HYDROCARBON SEEP
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE - RPS
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.2 °C

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404247	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	WQCC METALS + Cations/Anions per Scott 4/4/17			Air Bubbles (Y or N)
4.3.14	1420	GW	SB24	VOA-6	HCL/NEAT	-001			✓							✓					
				AMBER-1	NEAT												✓				
				PLASTIC-1	HNO_3													✓			
					HNO_3													✓			
					H_2SO_4													✓			
					NEAT													✓			
4.3.14	1600	GW	SB27	VOA-6	HCL/NEAT	-002			✓							✓					
				AMBER-1	NEAT												✓				
				PLASTIC-1	HNO_3													✓			
					HNO_3													✓			
					H_2SO_4													✓			
					NEAT													✓			

Date:	Time:	Relinquished by:	Received by:	Date	Time
4.5.14	0838	[signature]	[signature]	4/5/14	0838
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

July 09, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 2nd Quarter OrderNo.: 1406811

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/17/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1406811**
Date Reported: **7/9/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 10:00:00 AM
Lab ID: 1406811-001
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/19/2014 4:31:24 AM	13766
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/19/2014 4:31:24 AM	13766
Surr: DNOP	101	62.7-145		%REC	1	6/19/2014 4:31:24 AM	13766
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/19/2014 2:24:00 PM	R19392
Surr: BFB	116	70.9-130		%REC	1	6/19/2014 2:24:00 PM	R19392
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.85	0.10		mg/L	1	6/18/2014 11:23:48 AM	R19384
Chloride	1000	50	*	mg/L	100	6/24/2014 2:00:15 AM	R19470
Bromide	2.2	0.10		mg/L	1	6/18/2014 11:23:48 AM	R19384
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/18/2014 11:23:48 AM	R19384
Sulfate	160	10		mg/L	20	6/18/2014 12:01:02 PM	R19384
Nitrate+Nitrite as N	15	1.0	*	mg/L	5	6/19/2014 5:23:33 AM	R19384
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.083	0.0020		mg/L	1	6/27/2014 3:32:35 PM	R19563
Cadmium	ND	0.0020		mg/L	1	6/27/2014 3:32:35 PM	R19563
Calcium	35	1.0		mg/L	1	6/27/2014 3:32:35 PM	R19563
Chromium	ND	0.0060		mg/L	1	6/27/2014 3:32:35 PM	R19563
Copper	ND	0.0060		mg/L	1	6/27/2014 3:32:35 PM	R19563
Iron	0.047	0.020		mg/L	1	6/27/2014 3:32:35 PM	R19563
Magnesium	4.8	1.0		mg/L	1	6/27/2014 3:32:35 PM	R19563
Manganese	0.040	0.0020		mg/L	1	6/27/2014 3:32:35 PM	R19563
Potassium	10	1.0		mg/L	1	6/27/2014 3:32:35 PM	R19563
Silver	ND	0.0050		mg/L	1	7/1/2014 5:44:01 PM	R19605
Sodium	750	20		mg/L	20	7/2/2014 3:58:30 PM	R19650
Zinc	0.33	0.010		mg/L	1	6/27/2014 3:32:35 PM	R19563
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.11	0.0020		mg/L	1	6/27/2014 1:08:56 PM	13879
Cadmium	ND	0.0020		mg/L	1	6/27/2014 1:08:56 PM	13879
Calcium	41	1.0		mg/L	1	6/27/2014 1:08:56 PM	13879
Chromium	ND	0.0060		mg/L	1	6/27/2014 1:08:56 PM	13879
Copper	ND	0.0060		mg/L	1	6/27/2014 1:08:56 PM	13879
Iron	0.42	0.020	*	mg/L	1	6/27/2014 1:08:56 PM	13879
Magnesium	5.4	1.0		mg/L	1	6/27/2014 1:08:56 PM	13879
Manganese	0.055	0.0020	*	mg/L	1	6/27/2014 1:08:56 PM	13879
Potassium	9.0	1.0		mg/L	1	6/27/2014 1:08:56 PM	13879
Silver	ND	0.0050		mg/L	1	6/27/2014 1:08:56 PM	13879

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 10:00:00 AM
Lab ID: 1406811-001
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Sodium	890	50		mg/L	50	6/30/2014 4:39:56 PM	13879
Zinc	0.26	0.010		mg/L	1	6/27/2014 1:08:56 PM	13879
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	7/2/2014 5:59:40 PM	R19649
Lead	ND	0.010		mg/L	10	7/2/2014 5:59:40 PM	R19649
Selenium	0.022	0.010		mg/L	10	7/2/2014 5:59:40 PM	R19649
Uranium	0.077	0.010	*	mg/L	10	7/2/2014 5:59:40 PM	R19649
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	7/2/2014 2:37:22 PM	13879
Lead	ND	0.010		mg/L	10	7/2/2014 2:37:22 PM	13879
Selenium	0.028	0.010		mg/L	10	7/2/2014 2:37:22 PM	13879
Uranium	0.065	0.010	*	mg/L	10	7/2/2014 2:37:22 PM	13879
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/27/2014 2:53:26 PM	13930
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Acenaphthylene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Aniline	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Anthracene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Azobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Benz(a)anthracene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Benzo(a)pyrene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Benzo(b)fluoranthene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Benzo(k)fluoranthene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Benzoic acid	ND	20		µg/L	1	6/19/2014 5:32:28 PM	13776
Benzyl alcohol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Butyl benzyl phthalate	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Carbazole	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4-Chloroaniline	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2-Chloronaphthalene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 10:00:00 AM
Lab ID: 1406811-001
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2-Chlorophenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Chrysene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Di-n-butyl phthalate	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Di-n-octyl phthalate	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Dibenzofuran	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
1,2-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
1,3-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
1,4-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Diethyl phthalate	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Dimethyl phthalate	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2,4-Dichlorophenol	ND	20		µg/L	1	6/19/2014 5:32:28 PM	13776
2,4-Dimethylphenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/19/2014 5:32:28 PM	13776
2,4-Dinitrophenol	ND	20		µg/L	1	6/19/2014 5:32:28 PM	13776
2,4-Dinitrotoluene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2,6-Dinitrotoluene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Fluoranthene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Fluorene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Hexachlorobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Hexachlorobutadiene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Hexachloroethane	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Isophorone	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
1-Methylnaphthalene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2-Methylnaphthalene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2-Methylphenol	ND	20		µg/L	1	6/19/2014 5:32:28 PM	13776
3+4-Methylphenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
N-Nitrosodimethylamine	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Naphthalene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2-Nitroaniline	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
3-Nitroaniline	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4-Nitroaniline	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Nitrobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 10:00:00 AM
Lab ID: 1406811-001
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2-Nitrophenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
4-Nitrophenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Pentachlorophenol	ND	20		µg/L	1	6/19/2014 5:32:28 PM	13776
Phenanthrene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Phenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Pyrene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Pyridine	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/19/2014 5:32:28 PM	13776
Surr: 2-Fluorophenol	52.6	12.1-85.8		%REC	1	6/19/2014 5:32:28 PM	13776
Surr: Phenol-d5	41.0	17.7-65.8		%REC	1	6/19/2014 5:32:28 PM	13776
Surr: 2,4,6-Tribromophenol	61.6	26-138		%REC	1	6/19/2014 5:32:28 PM	13776
Surr: Nitrobenzene-d5	81.3	47.5-119		%REC	1	6/19/2014 5:32:28 PM	13776
Surr: 2-Fluorobiphenyl	78.5	48.1-106		%REC	1	6/19/2014 5:32:28 PM	13776
Surr: 4-Terphenyl-d14	76.5	44-113		%REC	1	6/19/2014 5:32:28 PM	13776
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Toluene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Ethylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Methyl tert-butyl ether (MTBE)	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2,4-Trimethylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,3,5-Trimethylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2-Dichloroethane (EDC)	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2-Dibromoethane (EDB)	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Naphthalene	ND	2.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1-Methylnaphthalene	ND	4.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
2-Methylnaphthalene	ND	4.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Acetone	ND	10	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Bromobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Bromodichloromethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Bromoform	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Bromomethane	ND	3.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
2-Butanone	ND	10	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Carbon disulfide	ND	10	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Carbon Tetrachloride	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Chlorobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Chloroethane	ND	2.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Chloroform	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 10:00:00 AM
Lab ID: 1406811-001
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Chloromethane	ND	3.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
2-Chlorotoluene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
4-Chlorotoluene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
cis-1,2-DCE	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
cis-1,3-Dichloropropene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2-Dibromo-3-chloropropane	ND	2.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Dibromochloromethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Dibromomethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2-Dichlorobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,3-Dichlorobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,4-Dichlorobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Dichlorodifluoromethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1-Dichloroethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1-Dichloroethene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2-Dichloropropane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,3-Dichloropropane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
2,2-Dichloropropane	ND	2.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1-Dichloropropene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Hexachlorobutadiene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
2-Hexanone	ND	10	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Isopropylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
4-Isopropyltoluene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
4-Methyl-2-pentanone	ND	10	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Methylene Chloride	ND	3.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
n-Butylbenzene	ND	3.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
n-Propylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
sec-Butylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Styrene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
tert-Butylbenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1,1,2-Tetrachloroethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1,2,2-Tetrachloroethane	ND	2.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Tetrachloroethene (PCE)	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
trans-1,2-DCE	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
trans-1,3-Dichloropropene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2,3-Trichlorobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2,4-Trichlorobenzene	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1,1-Trichloroethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,1,2-Trichloroethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Trichloroethene (TCE)	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 10:00:00 AM
Lab ID: 1406811-001
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Trichlorofluoromethane	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
1,2,3-Trichloropropane	ND	2.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Vinyl chloride	ND	1.0	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Xylenes, Total	ND	1.5	p	µg/L	1	6/18/2014 11:24:57 PM	R19361
Surr: 1,2-Dichloroethane-d4	104	70-130	p	%REC	1	6/18/2014 11:24:57 PM	R19361
Surr: 4-Bromofluorobenzene	103	70-130	p	%REC	1	6/18/2014 11:24:57 PM	R19361
Surr: Dibromofluoromethane	118	70-130	p	%REC	1	6/18/2014 11:24:57 PM	R19361
Surr: Toluene-d8	100	70-130	p	%REC	1	6/18/2014 11:24:57 PM	R19361

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 11:05:00 AM
Lab ID: 1406811-002
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.61	0.10		mg/L	1	6/18/2014 10:58:59 AM	R19384
Chloride	98	10		mg/L	20	6/18/2014 11:11:24 AM	R19384
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	6/18/2014 10:58:59 AM	R19384
Bromide	0.26	0.10		mg/L	1	6/18/2014 10:58:59 AM	R19384
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	6/18/2014 10:58:59 AM	R19384
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	6/18/2014 10:58:59 AM	R19384
Sulfate	60	10		mg/L	20	6/18/2014 11:11:24 AM	R19384
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.24	0.0020		mg/L	1	6/27/2014 3:46:43 PM	R19563
Cadmium	ND	0.0020		mg/L	1	6/27/2014 3:46:43 PM	R19563
Calcium	89	1.0		mg/L	1	6/27/2014 3:46:43 PM	R19563
Chromium	ND	0.0060		mg/L	1	6/27/2014 3:46:43 PM	R19563
Copper	ND	0.0060		mg/L	1	6/27/2014 3:46:43 PM	R19563
Iron	0.94	0.020	*	mg/L	1	6/27/2014 3:46:43 PM	R19563
Magnesium	17	1.0		mg/L	1	6/27/2014 3:46:43 PM	R19563
Manganese	3.3	0.010	*	mg/L	5	6/27/2014 3:48:28 PM	R19563
Potassium	2.6	1.0		mg/L	1	6/27/2014 3:46:43 PM	R19563
Silver	ND	0.0050		mg/L	1	7/1/2014 5:51:50 PM	R19605
Sodium	240	5.0		mg/L	5	7/2/2014 4:00:12 PM	R19650
Zinc	0.14	0.010		mg/L	1	6/27/2014 3:46:43 PM	R19563
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.61	0.0020		mg/L	1	6/27/2014 1:12:49 PM	13879
Cadmium	ND	0.0020		mg/L	1	6/27/2014 1:12:49 PM	13879
Calcium	140	5.0		mg/L	5	6/27/2014 1:14:37 PM	13879
Chromium	0.013	0.0060		mg/L	1	6/27/2014 1:12:49 PM	13879
Copper	0.012	0.0060		mg/L	1	6/27/2014 1:12:49 PM	13879
Iron	10	1.0	*	mg/L	50	6/27/2014 1:18:00 PM	13879
Magnesium	27	1.0		mg/L	1	6/27/2014 1:12:49 PM	13879
Manganese	4.1	0.010	*	mg/L	5	6/27/2014 1:14:37 PM	13879
Potassium	4.3	1.0		mg/L	1	6/27/2014 1:12:49 PM	13879
Silver	ND	0.0050		mg/L	1	6/27/2014 1:12:49 PM	13879
Sodium	240	5.0		mg/L	5	6/30/2014 4:41:37 PM	13879
Zinc	0.036	0.010		mg/L	1	6/27/2014 1:12:49 PM	13879
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0054	0.0050		mg/L	5	7/2/2014 6:02:42 PM	R19649
Lead	ND	0.0050		mg/L	5	7/2/2014 6:02:42 PM	R19649
Selenium	ND	0.0050		mg/L	5	7/2/2014 6:02:42 PM	R19649
Uranium	0.022	0.0050		mg/L	5	7/2/2014 6:02:42 PM	R19649

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 11:05:00 AM
Lab ID: 1406811-002
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0063	0.0010		mg/L	1	7/2/2014 2:40:25 PM	13879
Lead	0.022	0.0010	*	mg/L	1	7/2/2014 2:40:25 PM	13879
Selenium	0.0045	0.0010		mg/L	1	7/2/2014 2:40:25 PM	13879
Uranium	0.027	0.0010		mg/L	1	7/2/2014 2:40:25 PM	13879
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/27/2014 2:58:59 PM	13930
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Acenaphthylene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Aniline	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Anthracene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Azobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Benz(a)anthracene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Benzo(a)pyrene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Benzo(b)fluoranthene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Benzo(k)fluoranthene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Benzoic acid	ND	20		µg/L	1	6/19/2014 3:35:02 PM	13776
Benzyl alcohol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Butyl benzyl phthalate	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Carbazole	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4-Chloroaniline	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2-Chloronaphthalene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2-Chlorophenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Chrysene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Di-n-butyl phthalate	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Di-n-octyl phthalate	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Dibenzofuran	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
1,2-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
1,3-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 11:05:00 AM
Lab ID: 1406811-002
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Diethyl phthalate	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Dimethyl phthalate	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2,4-Dichlorophenol	ND	20		µg/L	1	6/19/2014 3:35:02 PM	13776
2,4-Dimethylphenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/19/2014 3:35:02 PM	13776
2,4-Dinitrophenol	ND	20		µg/L	1	6/19/2014 3:35:02 PM	13776
2,4-Dinitrotoluene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2,6-Dinitrotoluene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Fluoranthene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Fluorene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Hexachlorobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Hexachlorobutadiene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Hexachloroethane	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Isophorone	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
1-Methylnaphthalene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2-Methylnaphthalene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2-Methylphenol	ND	20		µg/L	1	6/19/2014 3:35:02 PM	13776
3+4-Methylphenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
N-Nitrosodimethylamine	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Naphthalene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2-Nitroaniline	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
3-Nitroaniline	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4-Nitroaniline	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Nitrobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2-Nitrophenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
4-Nitrophenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Pentachlorophenol	ND	20		µg/L	1	6/19/2014 3:35:02 PM	13776
Phenanthrene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Phenol	39	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Pyrene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Pyridine	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 11:05:00 AM
Lab ID: 1406811-002
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/19/2014 3:35:02 PM	13776
Surr: 2-Fluorophenol	51.0	12.1-85.8		%REC	1	6/19/2014 3:35:02 PM	13776
Surr: Phenol-d5	43.8	17.7-65.8		%REC	1	6/19/2014 3:35:02 PM	13776
Surr: 2,4,6-Tribromophenol	81.0	26-138		%REC	1	6/19/2014 3:35:02 PM	13776
Surr: Nitrobenzene-d5	83.1	47.5-119		%REC	1	6/19/2014 3:35:02 PM	13776
Surr: 2-Fluorobiphenyl	93.1	48.1-106		%REC	1	6/19/2014 3:35:02 PM	13776
Surr: 4-Terphenyl-d14	87.4	44-113		%REC	1	6/19/2014 3:35:02 PM	13776

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 11:20:00 AM
Lab ID: 1406811-003
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Acenaphthylene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Aniline	11	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Anthracene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Azobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Benz(a)anthracene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Benzo(a)pyrene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Benzo(b)fluoranthene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Benzo(k)fluoranthene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Benzoic acid	ND	20		µg/L	1	6/19/2014 4:04:27 PM	13776
Benzyl alcohol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Butyl benzyl phthalate	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Carbazole	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4-Chloroaniline	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2-Chloronaphthalene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2-Chlorophenol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Chrysene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Di-n-butyl phthalate	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Di-n-octyl phthalate	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Dibenzofuran	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
1,2-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
1,3-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
1,4-Dichlorobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Diethyl phthalate	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Dimethyl phthalate	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2,4-Dichlorophenol	ND	20		µg/L	1	6/19/2014 4:04:27 PM	13776
2,4-Dimethylphenol	170	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/19/2014 4:04:27 PM	13776
2,4-Dinitrophenol	ND	20		µg/L	1	6/19/2014 4:04:27 PM	13776

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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 2nd Quarter
Collection Date: 6/16/2014 11:20:00 AM
Lab ID: 1406811-003
Matrix: AQUEOUS
Received Date: 6/17/2014 4:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2,6-Dinitrotoluene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Fluoranthene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Fluorene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Hexachlorobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Hexachlorobutadiene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Hexachloroethane	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Isophorone	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
1-Methylnaphthalene	37	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2-Methylnaphthalene	42	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2-Methylphenol	220	20		µg/L	1	6/19/2014 4:04:27 PM	13776
3+4-Methylphenol	160	10		µg/L	1	6/19/2014 4:04:27 PM	13776
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
N-Nitrosodimethylamine	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Naphthalene	140	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2-Nitroaniline	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
3-Nitroaniline	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4-Nitroaniline	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Nitrobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2-Nitrophenol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
4-Nitrophenol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Pentachlorophenol	ND	20		µg/L	1	6/19/2014 4:04:27 PM	13776
Phenanthrene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Phenol	420	50		µg/L	5	6/20/2014 10:31:11 AM	13776
Pyrene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Pyridine	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/19/2014 4:04:27 PM	13776
Surr: 2-Fluorophenol	26.5	12.1-85.8		%REC	1	6/19/2014 4:04:27 PM	13776
Surr: Phenol-d5	48.4	17.7-65.8		%REC	1	6/19/2014 4:04:27 PM	13776
Surr: 2,4,6-Tribromophenol	90.2	26-138		%REC	1	6/19/2014 4:04:27 PM	13776
Surr: Nitrobenzene-d5	88.6	47.5-119		%REC	1	6/19/2014 4:04:27 PM	13776
Surr: 2-Fluorobiphenyl	92.4	48.1-106		%REC	1	6/19/2014 4:04:27 PM	13776
Surr: 4-Terphenyl-d14	87.1	44-113		%REC	1	6/19/2014 4:04:27 PM	13776

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19563** RunNo: **19563**
Prep Date: Analysis Date: **6/27/2014** SeqNo: **566849** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19563** RunNo: **19563**
Prep Date: Analysis Date: **6/27/2014** SeqNo: **566850** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.6	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Calcium	49	1.0	50.00	0	97.4	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Copper	0.47	0.0060	0.5000	0	94.6	85	115			
Iron	0.51	0.020	0.5000	0	102	85	115			
Magnesium	49	1.0	50.00	0	98.0	85	115			
Manganese	0.50	0.0020	0.5000	0	99.8	85	115			
Potassium	48	1.0	50.00	0	96.4	85	115			
Zinc	0.48	0.010	0.5000	0	96.2	85	115			

Sample ID **1406811-001GMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **STP-1NW** Batch ID: **R19563** RunNo: **19563**
Prep Date: Analysis Date: **6/27/2014** SeqNo: **566938** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.08342	90.5	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.7	70	130			
Calcium	81	1.0	50.00	35.01	92.5	70	130			
Chromium	0.49	0.0060	0.5000	0.005410	96.3	70	130			
Copper	0.50	0.0060	0.5000	0.002490	98.9	70	130			
Iron	0.53	0.020	0.5000	0.04659	96.1	70	130			
Magnesium	52	1.0	50.00	4.760	93.8	70	130			
Manganese	0.51	0.0020	0.5000	0.04002	94.7	70	130			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **1406811-001GMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **STP-1NW** Batch ID: **R19563** RunNo: **19563**
Prep Date: Analysis Date: **6/27/2014** SeqNo: **566938** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	62	1.0	50.00	10.27	103	70	130			
Zinc	0.78	0.010	0.5000	0.3292	89.8	70	130			

Sample ID **1406811-001GMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **STP-1NW** Batch ID: **R19563** RunNo: **19563**
Prep Date: Analysis Date: **6/27/2014** SeqNo: **566939** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.53	0.0020	0.5000	0.08342	89.6	70	130	0.851	20	
Cadmium	0.48	0.0020	0.5000	0	96.5	70	130	1.24	20	
Calcium	81	1.0	50.00	35.01	91.8	70	130	0.464	20	
Chromium	0.49	0.0060	0.5000	0.005410	96.2	70	130	0.0596	20	
Copper	0.49	0.0060	0.5000	0.002490	98.3	70	130	0.599	20	
Iron	0.53	0.020	0.5000	0.04659	96.9	70	130	0.777	20	
Magnesium	52	1.0	50.00	4.760	93.8	70	130	0.0503	20	
Manganese	0.51	0.0020	0.5000	0.04002	93.4	70	130	1.28	20	
Potassium	62	1.0	50.00	10.27	104	70	130	0.641	20	
Zinc	0.77	0.010	0.5000	0.3292	87.5	70	130	1.51	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19605** RunNo: **19605**
Prep Date: Analysis Date: **7/1/2014** SeqNo: **568367** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19605** RunNo: **19605**
Prep Date: Analysis Date: **7/1/2014** SeqNo: **568368** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			

Sample ID **1406811-001GMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **STP-1NW** Batch ID: **R19605** RunNo: **19605**
Prep Date: Analysis Date: **7/1/2014** SeqNo: **568970** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.090	0.0050	0.1000	0	89.8	70	130			

Qualifiers:

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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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **1406811-001GMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **STP-1NW** Batch ID: **R19605** RunNo: **19605**
Prep Date: Analysis Date: **7/1/2014** SeqNo: **568971** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.089	0.0050	0.1000	0	88.8	70	130	1.08	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19650** RunNo: **19650**
Prep Date: Analysis Date: **7/2/2014** SeqNo: **570374** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19650** RunNo: **19650**
Prep Date: Analysis Date: **7/2/2014** SeqNo: **570375** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	48	1.0	50.00	0	96.7	85	115			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB-13879** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **13879** RunNo: **19525**
Prep Date: **6/25/2014** Analysis Date: **6/26/2014** SeqNo: **565020** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS-13879** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **13879** RunNo: **19525**
Prep Date: **6/25/2014** Analysis Date: **6/26/2014** SeqNo: **565021** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	100	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.6	85	115			
Chromium	0.50	0.0060	0.5000	0	99.9	85	115			
Copper	0.49	0.0060	0.5000	0	98.3	85	115			
Iron	0.52	0.020	0.5000	0	103	85	115			
Manganese	0.50	0.0020	0.5000	0	100	85	115			
Silver	0.10	0.0050	0.1000	0	100	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Sample ID **LCS CAT-13879** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **13879** RunNo: **19525**
Prep Date: **6/25/2014** Analysis Date: **6/26/2014** SeqNo: **565022** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	51	1.0	50.00	0	101	85	115			
Magnesium	51	1.0	50.00	0	102	85	115			
Potassium	49	1.0	50.00	0	98.6	85	115			
Sodium	50	1.0	50.00	0	99.7	85	115			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19649** RunNo: **19649**
Prep Date: Analysis Date: **7/2/2014** SeqNo: **570332** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.6	85	115			
Lead	0.025	0.0010	0.02500	0	99.4	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19649** RunNo: **19649**
Prep Date: Analysis Date: **7/2/2014** SeqNo: **570333** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	93.4	85	115			
Lead	0.025	0.0010	0.02500	0	98.7	85	115			
Selenium	0.024	0.0010	0.02500	0	94.4	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19649** RunNo: **19649**
Prep Date: Analysis Date: **7/2/2014** SeqNo: **570334** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19649** RunNo: **19649**
Prep Date: Analysis Date: **7/2/2014** SeqNo: **570335** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **LLLCS-13879** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **13879** RunNo: **19535**
Prep Date: **6/25/2014** Analysis Date: **6/26/2014** SeqNo: **565868** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.3	85	115			
Lead	0.025	0.0010	0.02500	0	98.2	85	115			
Selenium	0.024	0.0010	0.02500	0	97.2	85	115			
Uranium	0.025	0.0010	0.02500	0	99.0	85	115			

Sample ID **MB-13879** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **13879** RunNo: **19535**
Prep Date: **6/25/2014** Analysis Date: **6/26/2014** SeqNo: **565873** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID	**MB-13930**	SampType:	**MBLK**		TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**13930**		RunNo:	**19549**					
Prep Date:	**6/27/2014**	Analysis Date:	**6/27/2014**		SeqNo:	**566235**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.00020								

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19384** RunNo: **19384**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560593** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19384** RunNo: **19384**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560594** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.6	90	110			
Chloride	4.7	0.50	5.000	0	94.5	90	110			
Nitrogen, Nitrite (As N)	0.93	0.10	1.000	0	93.0	90	110			
Bromide	2.4	0.10	2.500	0	95.6	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	98.5	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	93.9	90	110			
Sulfate	9.7	0.50	10.00	0	97.2	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	96.9	90	110			

Sample ID **1406811-001EMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **STP-1NW** Batch ID: **R19384** RunNo: **19384**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560598** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	0.8475	80.7	72.7	110			
Bromide	4.5	0.10	2.500	2.178	92.9	85.1	108			
Phosphorus, Orthophosphate (As P	4.4	0.50	5.000	0.1927	83.3	81.3	101			H

Sample ID **1406811-001EMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **STP-1NW** Batch ID: **R19384** RunNo: **19384**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560599** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	0.8475	81.9	72.7	110	0.510	20	
Bromide	4.5	0.10	2.500	2.178	92.8	85.1	108	0.0301	20	
Phosphorus, Orthophosphate (As P	4.4	0.50	5.000	0.1927	84.2	81.3	101	1.12	20	H

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19384** RunNo: **19384**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560647** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19384** RunNo: **19384**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560648** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.7	90	110			
Chloride	4.8	0.50	5.000	0	95.2	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	95.1	90	110			
Bromide	2.4	0.10	2.500	0	96.8	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	100	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.6	90	110			
Sulfate	9.9	0.50	10.00	0	98.5	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.6	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19470** RunNo: **19470**
Prep Date: Analysis Date: **6/23/2014** SeqNo: **563268** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19470** RunNo: **19470**
Prep Date: Analysis Date: **6/23/2014** SeqNo: **563269** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.7	90	110			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB-13766** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **13766** RunNo: **19341**
Prep Date: **6/18/2014** Analysis Date: **6/18/2014** SeqNo: **560186** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		107	62.7	145			

Sample ID **LCS-13766** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **13766** RunNo: **19341**
Prep Date: **6/18/2014** Analysis Date: **6/18/2014** SeqNo: **560188** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	107	78.6	146			
Surr: DNOP	0.47		0.5000		94.8	62.7	145			

Sample ID **LCSD-13766** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **13766** RunNo: **19341**
Prep Date: **6/18/2014** Analysis Date: **6/18/2014** SeqNo: **560189** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	93.5	78.6	146	13.8	26.5	
Surr: DNOP	0.44		0.5000		88.0	62.7	145	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.
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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBW**	Batch ID:	**R19392**	RunNo:	**19392**					
Prep Date:		Analysis Date:	**6/19/2014**	SeqNo:	**561077**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND	0.050								
Surr: BFB		19		20.00		97.2	70.9	130			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSW**	Batch ID:	**R19392**	RunNo:	**19392**					
Prep Date:		Analysis Date:	**6/19/2014**	SeqNo:	**561078**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		0.51	0.050	0.5000	0	103	80	120			
Surr: BFB		20		20.00		102	70.9	130			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R19361**	RunNo: **19361**			
Prep Date:	Analysis Date: **6/18/2014**	SeqNo: **559943**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R19361** RunNo: **19361**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **559943** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	9.8		10.00		98.3	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R19361** RunNo: **19361**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **559947** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	103	80	120			
Chlorobenzene	19	1.0	20.00	0	94.4	70	130			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R19361**	RunNo: **19361**			
Prep Date:	Analysis Date: **6/18/2014**	SeqNo: **559947**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	110	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	94.9	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **mb-13776**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **13776**	RunNo: **19399**			
Prep Date: **6/19/2014**	Analysis Date: **6/19/2014**	SeqNo: **561284**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **mb-13776**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **13776**	RunNo: **19399**			
Prep Date: **6/19/2014**	Analysis Date: **6/19/2014**	SeqNo: **561284**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	120		200.0		61.8	12.1	85.8			
Surr: Phenol-d5	100		200.0		51.8	17.7	65.8			
Surr: 2,4,6-Tribromophenol	150		200.0		77.2	26	138			
Surr: Nitrobenzene-d5	92		100.0		92.1	47.5	119			
Surr: 2-Fluorobiphenyl	84		100.0		83.6	48.1	106			
Surr: 4-Terphenyl-d14	95		100.0		95.5	44	113			

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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **lcs-13776** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **13776** RunNo: **19399**
Prep Date: **6/19/2014** Analysis Date: **6/19/2014** SeqNo: **561285** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	84	10	100.0	0	83.8	50.3	109			
4-Chloro-3-methylphenol	180	10	200.0	0	89.2	51.2	113			
2-Chlorophenol	150	10	200.0	0	77.1	48.5	104			
1,4-Dichlorobenzene	66	10	100.0	0	65.8	39.5	106			
2,4-Dinitrotoluene	80	10	100.0	0	80.2	45.4	107			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.4	50.4	119			
4-Nitrophenol	110	10	200.0	0	52.8	15.5	62.2			
Pentachlorophenol	140	20	200.0	0	69.4	23.5	93.5			
Phenol	93	10	200.0	0	46.7	26.8	65.6			
Pyrene	100	10	100.0	0	103	54.4	108			
1,2,4-Trichlorobenzene	65	10	100.0	0	65.4	39.9	106			
Surr: 2-Fluorophenol	100		200.0		51.3	12.1	85.8			
Surr: Phenol-d5	88		200.0		44.1	17.7	65.8			
Surr: 2,4,6-Tribromophenol	150		200.0		75.6	26	138			
Surr: Nitrobenzene-d5	81		100.0		80.6	47.5	119			
Surr: 2-Fluorobiphenyl	84		100.0		84.1	48.1	106			
Surr: 4-Terphenyl-d14	87		100.0		87.0	44	113			

Sample ID **lcsd-13776** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **13776** RunNo: **19399**
Prep Date: **6/19/2014** Analysis Date: **6/19/2014** SeqNo: **561286** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	94	10	100.0	0	93.7	50.3	109	11.1	27.2	
4-Chloro-3-methylphenol	220	10	200.0	0	108	51.2	113	19.0	25.9	
2-Chlorophenol	190	10	200.0	0	95.2	48.5	104	21.0	22.5	
1,4-Dichlorobenzene	85	10	100.0	0	85.3	39.5	106	25.9	24.6	R
2,4-Dinitrotoluene	97	10	100.0	0	97.0	45.4	107	19.0	25.3	
N-Nitrosodi-n-propylamine	94	10	100.0	0	94.0	50.4	119	16.8	23.6	
4-Nitrophenol	140	10	200.0	0	67.5	15.5	62.2	24.6	34.7	S
Pentachlorophenol	150	20	200.0	0	76.8	23.5	93.5	10.2	32.8	
Phenol	110	10	200.0	0	57.3	26.8	65.6	20.4	25.5	
Pyrene	120	10	100.0	0	115	54.4	108	11.7	31.4	S
1,2,4-Trichlorobenzene	81	10	100.0	0	80.8	39.9	106	21.0	25.9	
Surr: 2-Fluorophenol	130		200.0		63.8	12.1	85.8	0	0	
Surr: Phenol-d5	110		200.0		56.8	17.7	65.8	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.6	26	138	0	0	
Surr: Nitrobenzene-d5	100		100.0		103	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	93		100.0		93.0	48.1	106	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.
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#: **1406811**
09-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **lcsd-13776** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **13776** RunNo: **19399**
Prep Date: **6/19/2014** Analysis Date: **6/19/2014** SeqNo: **561286** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		107	44	113	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1406811 RcptNo: 1

Received by/date: CS 06/17/14

Logged By: **Celina Sessa** 6/17/2014 4:14:00 PM Celina Sessa

Completed By: **Celina Sessa** 6/17/2014 5:07:26 PM Celina Sessa

Reviewed By: 06/18/14

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° 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 ☑ CS 06/18/14
9. Was preservative added to bottles? Yes ☑ No ☑ NA ☐
   metals analysis: Added 0.4 ml HNO_3 to -001G for an acceptable pH. Held in login for 24 hours. CS 06/18/14
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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

CS 06/18/14

# of preserved bottles checked for pH: 36
(<2 or >12 unless noted)
Adjusted? yes
Checked by: CS

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			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2014 2ND QUARTER

MKTF-16 / MKTF-17 / STP-1NW

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON/K. SANCHEZ

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1406811	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions										Air Bubbles (Y or N)
6/16/2014	1000	H20	STP-1NW	MISC	MISC	-001	X	X	X	X	X	X										
6/16/2014	1105	H20	MKTF-17	MISC	MISC	-002			X	X	X	X										
6/16/2014	1120	H20	MKTF-16	1-L AMBER	NONE	-003			X													

Date	Time	Relinquished by	Received by	Date	Time
6/17/14	0900			6-17-14	2:00
6-17-14	414		Celin Sm	06/17/14	16:14

Remarks:

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.

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

July 08, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 2nd Quarter OrderNo.: 1406364

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 15 sample(s) on 6/6/2014 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 qualifers 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,

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

Case Narrative

WO#: **1406364**
Date: **7/8/2014**

CLIENT: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Analytical Notes for EPA Method 8260 and 8015 GRO:
Sample "MKTF-17" was analyzed with headspace.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:35:00 AM
Lab ID: 1406364-001
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	510	10		mg/L	10	6/11/2014 11:08:45 PM	13583
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	6/11/2014 11:08:45 PM	13583
Surr: DNOP	0	62.7-145	S	%REC	10	6/11/2014 11:08:45 PM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.60	0.10		mg/L	1	6/9/2014 12:44:07 PM	R19161
Chloride	400	10		mg/L	20	6/9/2014 12:56:32 PM	R19161
Bromide	0.96	0.10		mg/L	1	6/9/2014 12:44:07 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 12:44:07 PM	R19161
Sulfate	0.58	0.50		mg/L	1	6/9/2014 12:44:07 PM	R19161
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/9/2014 10:00:18 PM	R19165
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.4	0.010		mg/L	5	6/12/2014 4:31:40 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 4:29:57 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 4:29:57 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 4:29:57 PM	R19227
Iron	4.7	0.10	*	mg/L	5	6/12/2014 4:31:40 PM	R19227
Manganese	1.7	0.010	*	mg/L	5	6/12/2014 4:31:40 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 4:29:57 PM	R19227
Zinc	0.028	0.010		mg/L	1	6/12/2014 4:29:57 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	4.7	0.010	*	mg/L	5	6/18/2014 12:48:55 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:07:40 PM	13717
Calcium	230	5.0		mg/L	5	6/18/2014 12:48:55 PM	13717
Chromium	0.035	0.0060		mg/L	1	6/17/2014 2:07:40 PM	13717
Copper	0.038	0.0060		mg/L	1	6/17/2014 2:07:40 PM	13717
Iron	35	1.0	*	mg/L	50	6/18/2014 12:50:25 PM	13717
Magnesium	43	1.0		mg/L	1	6/18/2014 12:47:26 PM	13717
Manganese	4.1	0.010	*	mg/L	5	6/18/2014 12:48:55 PM	13717
Potassium	7.1	1.0		mg/L	1	6/18/2014 12:47:26 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 5:44:46 PM	13717
Sodium	440	5.0		mg/L	5	6/18/2014 5:46:30 PM	13717
Zinc	0.078	0.010		mg/L	1	6/18/2014 12:47:26 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/18/2014 3:43:13 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 3:43:13 PM	R19364
Selenium	0.013	0.0050		mg/L	5	6/20/2014 3:38:31 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:25:45 PM	R19508

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:35:00 AM
Lab ID: 1406364-001
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0070	0.0050		mg/L	5	6/17/2014 3:59:35 PM	13717
Lead	0.074	0.0050	*	mg/L	5	6/17/2014 3:59:35 PM	13717
Selenium	0.0091	0.0050		mg/L	5	6/17/2014 3:59:35 PM	13717
Uranium	ND	0.0050		mg/L	5	6/17/2014 3:59:35 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 12:18:42 PM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Aniline	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Anthracene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Azobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Benzoic acid	ND	20		µg/L	1	6/10/2014 8:13:29 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Carbazole	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Chrysene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:35:00 AM
Lab ID: 1406364-001
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2014 8:13:29 PM	13597
2,4-Dimethylphenol	50	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2014 8:13:29 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2014 8:13:29 PM	13597
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Fluoranthene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Fluorene	20	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Isophorone	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
1-Methylnaphthalene	310	20		µg/L	2	6/12/2014 12:42:10 PM	13597
2-Methylnaphthalene	310	20		µg/L	2	6/12/2014 12:42:10 PM	13597
2-Methylphenol	60	20		µg/L	1	6/10/2014 8:13:29 PM	13597
3+4-Methylphenol	31	10		µg/L	1	6/10/2014 8:13:29 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Naphthalene	310	20		µg/L	2	6/12/2014 12:42:10 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/10/2014 8:13:29 PM	13597
Phenanthrene	28	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Phenol	19	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Pyrene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Pyridine	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:35:00 AM
Lab ID: 1406364-001
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2014 8:13:29 PM	13597
Surr: 2-Fluorophenol	18.4	12.1-85.8		%REC	1	6/10/2014 8:13:29 PM	13597
Surr: Phenol-d5	35.0	17.7-65.8		%REC	1	6/10/2014 8:13:29 PM	13597
Surr: 2,4,6-Tribromophenol	60.4	26-138		%REC	1	6/10/2014 8:13:29 PM	13597
Surr: Nitrobenzene-d5	83.1	47.5-119		%REC	1	6/10/2014 8:13:29 PM	13597
Surr: 2-Fluorobiphenyl	58.7	48.1-106		%REC	1	6/10/2014 8:13:29 PM	13597
Surr: 4-Terphenyl-d14	66.6	44-113		%REC	1	6/10/2014 8:13:29 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	8700	500		µg/L	500	6/13/2014 3:58:45 PM	R19253
Toluene	7100	500		µg/L	500	6/13/2014 3:58:45 PM	R19253
Ethylbenzene	920	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Methyl tert-butyl ether (MTBE)	420	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2,4-Trimethylbenzene	1100	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,3,5-Trimethylbenzene	270	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Naphthalene	300	100		µg/L	50	6/11/2014 6:33:26 PM	R19202
1-Methylnaphthalene	ND	200		µg/L	50	6/11/2014 6:33:26 PM	R19202
2-Methylnaphthalene	ND	200		µg/L	50	6/11/2014 6:33:26 PM	R19202
Acetone	ND	500		µg/L	50	6/11/2014 6:33:26 PM	R19202
Bromobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Bromodichloromethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Bromoform	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Bromomethane	ND	150		µg/L	50	6/11/2014 6:33:26 PM	R19202
2-Butanone	ND	500		µg/L	50	6/11/2014 6:33:26 PM	R19202
Carbon disulfide	ND	500		µg/L	50	6/11/2014 6:33:26 PM	R19202
Carbon Tetrachloride	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Chlorobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Chloroethane	ND	100		µg/L	50	6/11/2014 6:33:26 PM	R19202
Chloroform	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Chloromethane	ND	150		µg/L	50	6/11/2014 6:33:26 PM	R19202
2-Chlorotoluene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
4-Chlorotoluene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
cis-1,2-DCE	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/11/2014 6:33:26 PM	R19202
Dibromochloromethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Dibromomethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2-Dichlorobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:35:00 AM
Lab ID: 1406364-001
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,4-Dichlorobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Dichlorodifluoromethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1-Dichloroethane	94	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1-Dichloroethene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2-Dichloropropane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,3-Dichloropropane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
2,2-Dichloropropane	ND	100		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1-Dichloropropene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Hexachlorobutadiene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
2-Hexanone	ND	500		µg/L	50	6/11/2014 6:33:26 PM	R19202
Isopropylbenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
4-Isopropyltoluene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
4-Methyl-2-pentanone	ND	500		µg/L	50	6/11/2014 6:33:26 PM	R19202
Methylene Chloride	ND	150		µg/L	50	6/11/2014 6:33:26 PM	R19202
n-Butylbenzene	ND	150		µg/L	50	6/11/2014 6:33:26 PM	R19202
n-Propylbenzene	140	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
sec-Butylbenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Styrene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
tert-Butylbenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/11/2014 6:33:26 PM	R19202
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
trans-1,2-DCE	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1,1-Trichloroethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,1,2-Trichloroethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Trichloroethene (TCE)	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Trichlorofluoromethane	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
1,2,3-Trichloropropane	ND	100		µg/L	50	6/11/2014 6:33:26 PM	R19202
Vinyl chloride	ND	50		µg/L	50	6/11/2014 6:33:26 PM	R19202
Xylenes, Total	4300	75		µg/L	50	6/11/2014 6:33:26 PM	R19202
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	50	6/11/2014 6:33:26 PM	R19202
Surr: 4-Bromofluorobenzene	88.9	70-130		%REC	50	6/11/2014 6:33:26 PM	R19202
Surr: Dibromofluoromethane	108	70-130		%REC	50	6/11/2014 6:33:26 PM	R19202
Surr: Toluene-d8	98.9	70-130		%REC	50	6/11/2014 6:33:26 PM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:35:00 AM
Lab ID: 1406364-001
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	50	2.5		mg/L	50	6/11/2014 6:33:26 PM	R19202
Surr: BFB	96.8	70-130		%REC	50	6/11/2014 6:33:26 PM	R19202

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:30:00 AM
Lab ID: 1406364-002
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/11/2014 8:45:09 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2014 8:45:09 AM	13583
Surr: DNOP	97.9	62.7-145		%REC	1	6/11/2014 8:45:09 AM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.76	0.10		mg/L	1	6/9/2014 1:08:57 PM	R19161
Chloride	750	50		mg/L	100	6/11/2014 3:07:44 AM	R19191
Bromide	0.46	0.10		mg/L	1	6/9/2014 1:08:57 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 1:08:57 PM	R19161
Sulfate	200	10		mg/L	20	6/9/2014 1:21:22 PM	R19161
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/9/2014 10:12:43 PM	R19165
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	6/12/2014 4:42:19 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 4:42:19 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 4:42:19 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 4:42:19 PM	R19227
Iron	0.34	0.020	*	mg/L	1	6/12/2014 4:42:19 PM	R19227
Manganese	0.56	0.0020	*	mg/L	1	6/12/2014 4:42:19 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 4:42:19 PM	R19227
Zinc	0.010	0.010		mg/L	1	6/12/2014 4:42:19 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.20	0.0020		mg/L	1	6/17/2014 2:09:31 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:09:31 PM	13717
Calcium	110	5.0		mg/L	5	6/18/2014 12:56:22 PM	13717
Chromium	ND	0.0060		mg/L	1	6/17/2014 2:09:31 PM	13717
Copper	ND	0.0060		mg/L	1	6/17/2014 2:09:31 PM	13717
Iron	4.2	0.20	*	mg/L	10	6/18/2014 1:00:52 PM	13717
Magnesium	17	1.0		mg/L	1	6/17/2014 2:09:31 PM	13717
Manganese	0.70	0.010	*	mg/L	5	6/18/2014 12:56:22 PM	13717
Potassium	9.2	1.0		mg/L	1	6/17/2014 2:09:31 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 5:53:29 PM	13717
Sodium	720	10		mg/L	10	6/18/2014 5:58:57 PM	13717
Zinc	0.017	0.010		mg/L	1	6/18/2014 12:52:00 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/18/2014 3:48:13 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 3:48:13 PM	R19364
Selenium	0.012	0.0050		mg/L	5	6/20/2014 3:41:33 PM	R19449
Uranium	0.056	0.010	*	mg/L	10	6/25/2014 12:28:09 PM	R19508

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:30:00 AM
Lab ID: 1406364-002
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/17/2014 4:04:34 PM	13717
Lead	ND	0.0050		mg/L	5	6/17/2014 4:04:34 PM	13717
Selenium	0.0069	0.0050		mg/L	5	6/17/2014 4:04:34 PM	13717
Uranium	0.056	0.0050	*	mg/L	5	6/17/2014 4:04:34 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 10:23:15 AM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Aniline	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Anthracene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Azobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Benzoic acid	ND	20		µg/L	1	6/10/2014 8:42:40 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Carbazole	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Chrysene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:30:00 AM
Lab ID: 1406364-002
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2014 8:42:40 PM	13597
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2014 8:42:40 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2014 8:42:40 PM	13597
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Fluoranthene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Fluorene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Isophorone	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
1-Methylnaphthalene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2-Methylphenol	ND	20		µg/L	1	6/10/2014 8:42:40 PM	13597
3+4-Methylphenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Naphthalene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/10/2014 8:42:40 PM	13597
Phenanthrene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Phenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Pyrene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Pyridine	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:30:00 AM
Lab ID: 1406364-002
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2014 8:42:40 PM	13597
Surr: 2-Fluorophenol	34.1	12.1-85.8		%REC	1	6/10/2014 8:42:40 PM	13597
Surr: Phenol-d5	31.7	17.7-65.8		%REC	1	6/10/2014 8:42:40 PM	13597
Surr: 2,4,6-Tribromophenol	61.0	26-138		%REC	1	6/10/2014 8:42:40 PM	13597
Surr: Nitrobenzene-d5	68.7	47.5-119		%REC	1	6/10/2014 8:42:40 PM	13597
Surr: 2-Fluorobiphenyl	65.2	48.1-106		%REC	1	6/10/2014 8:42:40 PM	13597
Surr: 4-Terphenyl-d14	58.7	44-113		%REC	1	6/10/2014 8:42:40 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	230	10		µg/L	10	6/13/2014 4:27:30 PM	R19253
Toluene	3.6	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Ethylbenzene	22	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Methyl tert-butyl ether (MTBE)	42	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2,4-Trimethylbenzene	31	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,3,5-Trimethylbenzene	1.9	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2-Dichloroethane (EDC)	8.1	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Naphthalene	4.9	2.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Acetone	12	10		µg/L	1	6/11/2014 8:00:04 PM	R19202
Bromobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Bromoform	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Bromomethane	ND	3.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
2-Butanone	ND	10		µg/L	1	6/11/2014 8:00:04 PM	R19202
Carbon disulfide	ND	10		µg/L	1	6/11/2014 8:00:04 PM	R19202
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Chlorobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Chloroethane	ND	2.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Chloroform	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Chloromethane	ND	3.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
cis-1,2-DCE	11	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Dibromomethane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202

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Hall Environmental Analysis Laboratory, Inc.

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Project: 2014 2nd Quarter
Collection Date: 6/6/2014 11:30:00 AM
Lab ID: 1406364-002
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1-Dichloroethane	70	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1-Dichloroethene	41	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
2-Hexanone	ND	10		µg/L	1	6/11/2014 8:00:04 PM	R19202
Isopropylbenzene	3.1	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2014 8:00:04 PM	R19202
Methylene Chloride	ND	3.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
n-Propylbenzene	9.0	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Styrene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1,1-Trichloroethane	3.5	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,1,2-Trichloroethane	1.2	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Trichloroethene (TCE)	4.1	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Vinyl chloride	1.0	1.0		µg/L	1	6/11/2014 8:00:04 PM	R19202
Xylenes, Total	34	1.5		µg/L	1	6/11/2014 8:00:04 PM	R19202
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	6/11/2014 8:00:04 PM	R19202
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	6/11/2014 8:00:04 PM	R19202
Surr: Dibromofluoromethane	100	70-130		%REC	1	6/11/2014 8:00:04 PM	R19202
Surr: Toluene-d8	103	70-130		%REC	1	6/11/2014 8:00:04 PM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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Lab ID: 1406364-002
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Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	1.5	0.050		mg/L	1	6/11/2014 8:00:04 PM	R19202
Surr: BFB	94.8	70-130		%REC	1	6/11/2014 8:00:04 PM	R19202

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 4:10:00 PM
Lab ID: 1406364-003
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.9	1.0		mg/L	1	6/11/2014 11:38:29 PM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2014 11:38:29 PM	13583
Surr: DNOP	114	62.7-145		%REC	1	6/11/2014 11:38:29 PM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.70	0.10		mg/L	1	6/9/2014 1:33:46 PM	R19161
Chloride	190	10		mg/L	20	6/9/2014 1:46:10 PM	R19161
Bromide	1.8	0.10		mg/L	1	6/9/2014 1:33:46 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 1:33:46 PM	R19161
Sulfate	6.8	0.50		mg/L	1	6/9/2014 1:33:46 PM	R19161
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/9/2014 10:25:07 PM	R19165
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.9	0.010		mg/L	5	6/12/2014 4:47:59 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 4:46:18 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 4:46:18 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 4:46:18 PM	R19227
Iron	2.5	0.10	*	mg/L	5	6/12/2014 4:47:59 PM	R19227
Manganese	1.4	0.010	*	mg/L	5	6/12/2014 4:47:59 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 4:46:18 PM	R19227
Zinc	ND	0.010		mg/L	1	6/12/2014 4:46:18 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.4	0.010		mg/L	5	6/18/2014 1:22:59 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:23:44 PM	13717
Calcium	120	5.0		mg/L	5	6/18/2014 1:22:59 PM	13717
Chromium	0.0085	0.0060		mg/L	1	6/17/2014 2:23:44 PM	13717
Copper	0.013	0.0060		mg/L	1	6/17/2014 2:23:44 PM	13717
Iron	7.9	0.20	*	mg/L	10	6/18/2014 1:24:23 PM	13717
Magnesium	31	1.0		mg/L	1	6/17/2014 2:23:44 PM	13717
Manganese	2.1	0.010	*	mg/L	5	6/18/2014 1:22:59 PM	13717
Potassium	5.0	1.0		mg/L	1	6/17/2014 2:23:44 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 6:00:51 PM	13717
Sodium	340	5.0		mg/L	5	6/18/2014 6:02:31 PM	13717
Zinc	0.020	0.010		mg/L	1	6/18/2014 1:21:31 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0078	0.0050		mg/L	5	6/18/2014 3:53:12 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 3:53:12 PM	R19364
Selenium	0.022	0.0050		mg/L	5	6/20/2014 3:54:57 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:30:34 PM	R19508

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 4:10:00 PM
Lab ID: 1406364-003
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0061	0.0050		mg/L	5	6/17/2014 4:09:33 PM	13717
Lead	0.013	0.0050		mg/L	5	6/17/2014 4:09:33 PM	13717
Selenium	0.013	0.0050		mg/L	5	6/17/2014 4:09:33 PM	13717
Uranium	0.0090	0.0050		mg/L	5	6/17/2014 4:09:33 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 10:25:05 AM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Aniline	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Anthracene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Azobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Benzoic acid	21	20		µg/L	1	6/10/2014 9:11:48 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Carbazole	11	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Chrysene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 4:10:00 PM
Lab ID: 1406364-003
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2014 9:11:48 PM	13597
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2014 9:11:48 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2014 9:11:48 PM	13597
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Fluoranthene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Fluorene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Isophorone	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
1-Methylnaphthalene	110	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2-Methylnaphthalene	140	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2-Methylphenol	ND	20		µg/L	1	6/10/2014 9:11:48 PM	13597
3+4-Methylphenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Naphthalene	240	20		µg/L	2	6/12/2014 1:11:20 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/10/2014 9:11:48 PM	13597
Phenanthrene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Phenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Pyrene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Pyridine	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 4:10:00 PM
Lab ID: 1406364-003
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2014 9:11:48 PM	13597
Surr: 2-Fluorophenol	39.3	12.1-85.8		%REC	1	6/10/2014 9:11:48 PM	13597
Surr: Phenol-d5	39.7	17.7-65.8		%REC	1	6/10/2014 9:11:48 PM	13597
Surr: 2,4,6-Tribromophenol	75.9	26-138		%REC	1	6/10/2014 9:11:48 PM	13597
Surr: Nitrobenzene-d5	74.9	47.5-119		%REC	1	6/10/2014 9:11:48 PM	13597
Surr: 2-Fluorobiphenyl	74.5	48.1-106		%REC	1	6/10/2014 9:11:48 PM	13597
Surr: 4-Terphenyl-d14	70.0	44-113		%REC	1	6/10/2014 9:11:48 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	670	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Toluene	19	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Ethylbenzene	570	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Methyl tert-butyl ether (MTBE)	1800	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2,4-Trimethylbenzene	270	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,3,5-Trimethylbenzene	49	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Naphthalene	310	20		µg/L	10	6/11/2014 9:26:51 PM	R19202
1-Methylnaphthalene	130	40		µg/L	10	6/11/2014 9:26:51 PM	R19202
2-Methylnaphthalene	170	40		µg/L	10	6/11/2014 9:26:51 PM	R19202
Acetone	ND	100		µg/L	10	6/11/2014 9:26:51 PM	R19202
Bromobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Bromodichloromethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Bromoform	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Bromomethane	ND	30		µg/L	10	6/11/2014 9:26:51 PM	R19202
2-Butanone	ND	100		µg/L	10	6/11/2014 9:26:51 PM	R19202
Carbon disulfide	ND	100		µg/L	10	6/11/2014 9:26:51 PM	R19202
Carbon Tetrachloride	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Chlorobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Chloroethane	ND	20		µg/L	10	6/11/2014 9:26:51 PM	R19202
Chloroform	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Chloromethane	ND	30		µg/L	10	6/11/2014 9:26:51 PM	R19202
2-Chlorotoluene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
4-Chlorotoluene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
cis-1,2-DCE	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/11/2014 9:26:51 PM	R19202
Dibromochloromethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Dibromomethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2-Dichlorobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 4:10:00 PM
Lab ID: 1406364-003
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,4-Dichlorobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Dichlorodifluoromethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1-Dichloroethane	11	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1-Dichloroethene	21	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2-Dichloropropane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,3-Dichloropropane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
2,2-Dichloropropane	ND	20		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1-Dichloropropene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Hexachlorobutadiene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
2-Hexanone	ND	100		µg/L	10	6/11/2014 9:26:51 PM	R19202
Isopropylbenzene	20	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
4-Isopropyltoluene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
4-Methyl-2-pentanone	ND	100		µg/L	10	6/11/2014 9:26:51 PM	R19202
Methylene Chloride	ND	30		µg/L	10	6/11/2014 9:26:51 PM	R19202
n-Butylbenzene	ND	30		µg/L	10	6/11/2014 9:26:51 PM	R19202
n-Propylbenzene	46	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
sec-Butylbenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Styrene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
tert-Butylbenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/11/2014 9:26:51 PM	R19202
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
trans-1,2-DCE	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1,1-Trichloroethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,1,2-Trichloroethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Trichloroethene (TCE)	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Trichlorofluoromethane	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
1,2,3-Trichloropropane	ND	20		µg/L	10	6/11/2014 9:26:51 PM	R19202
Vinyl chloride	ND	10		µg/L	10	6/11/2014 9:26:51 PM	R19202
Xylenes, Total	680	15		µg/L	10	6/11/2014 9:26:51 PM	R19202
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%REC	10	6/11/2014 9:26:51 PM	R19202
Surr: 4-Bromofluorobenzene	90.8	70-130		%REC	10	6/11/2014 9:26:51 PM	R19202
Surr: Dibromofluoromethane	107	70-130		%REC	10	6/11/2014 9:26:51 PM	R19202
Surr: Toluene-d8	102	70-130		%REC	10	6/11/2014 9:26:51 PM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 4:10:00 PM
Lab ID: 1406364-003
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	8.2	0.50		mg/L	10	6/11/2014 9:26:51 PM	R19202
Surr: BFB	96.5	70-130		%REC	10	6/11/2014 9:26:51 PM	R19202

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 5:30:00 PM
Lab ID: 1406364-004
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.7	1.0		mg/L	1	6/12/2014 12:08:17 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 12:08:17 AM	13583
Surr: DNOP	117	62.7-145		%REC	1	6/12/2014 12:08:17 AM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.43	0.10		mg/L	1	6/9/2014 1:58:34 PM	R19161
Chloride	180	10		mg/L	20	6/9/2014 2:10:58 PM	R19161
Bromide	1.1	0.10		mg/L	1	6/9/2014 1:58:34 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 1:58:34 PM	R19161
Sulfate	78	10		mg/L	20	6/9/2014 2:10:58 PM	R19161
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/9/2014 10:37:31 PM	R19165
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.44	0.0020		mg/L	1	6/12/2014 4:49:51 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 4:49:51 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 4:49:51 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 4:49:51 PM	R19227
Iron	3.4	0.10	*	mg/L	5	6/12/2014 4:51:41 PM	R19227
Manganese	3.6	0.010	*	mg/L	5	6/12/2014 4:51:41 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 4:49:51 PM	R19227
Zinc	ND	0.010		mg/L	1	6/12/2014 4:49:51 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.58	0.0020		mg/L	1	6/17/2014 2:25:36 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:25:36 PM	13717
Calcium	150	5.0		mg/L	5	6/18/2014 1:27:27 PM	13717
Chromium	ND	0.0060		mg/L	1	6/17/2014 2:25:36 PM	13717
Copper	ND	0.0060		mg/L	1	6/17/2014 2:25:36 PM	13717
Iron	6.7	0.20	*	mg/L	10	6/18/2014 1:28:51 PM	13717
Magnesium	33	1.0		mg/L	1	6/17/2014 2:25:36 PM	13717
Manganese	3.8	0.010	*	mg/L	5	6/18/2014 1:27:27 PM	13717
Potassium	3.1	1.0		mg/L	1	6/17/2014 2:25:36 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 6:04:20 PM	13717
Sodium	220	5.0		mg/L	5	6/18/2014 6:05:59 PM	13717
Zinc	0.015	0.010		mg/L	1	6/18/2014 1:25:59 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/18/2014 3:58:11 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 3:58:11 PM	R19364
Selenium	0.014	0.0050		mg/L	5	6/20/2014 3:57:59 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:37:52 PM	R19508

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 5:30:00 PM
Lab ID: 1406364-004
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/17/2014 4:14:33 PM	13717
Lead	0.0058	0.0050		mg/L	5	6/17/2014 4:14:33 PM	13717
Selenium	0.0073	0.0050		mg/L	5	6/17/2014 4:14:33 PM	13717
Uranium	0.0060	0.0050		mg/L	5	6/17/2014 4:14:33 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 10:26:56 AM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Aniline	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Anthracene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Azobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Benzoic acid	ND	20		µg/L	1	6/10/2014 9:40:43 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Carbazole	10	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Chrysene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 5:30:00 PM
Lab ID: 1406364-004
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2014 9:40:43 PM	13597
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2014 9:40:43 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2014 9:40:43 PM	13597
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Fluoranthene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Fluorene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Isophorone	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
1-Methylnaphthalene	58	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2-Methylnaphthalene	14	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2-Methylphenol	ND	20		µg/L	1	6/10/2014 9:40:43 PM	13597
3+4-Methylphenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Naphthalene	41	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/10/2014 9:40:43 PM	13597
Phenanthrene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Phenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Pyrene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Pyridine	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 5:30:00 PM
Lab ID: 1406364-004
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2014 9:40:43 PM	13597
Surr: 2-Fluorophenol	26.6	12.1-85.8		%REC	1	6/10/2014 9:40:43 PM	13597
Surr: Phenol-d5	35.0	17.7-65.8		%REC	1	6/10/2014 9:40:43 PM	13597
Surr: 2,4,6-Tribromophenol	30.8	26-138		%REC	1	6/10/2014 9:40:43 PM	13597
Surr: Nitrobenzene-d5	78.9	47.5-119		%REC	1	6/10/2014 9:40:43 PM	13597
Surr: 2-Fluorobiphenyl	75.5	48.1-106		%REC	1	6/10/2014 9:40:43 PM	13597
Surr: 4-Terphenyl-d14	72.3	44-113		%REC	1	6/10/2014 9:40:43 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	1300	100		µg/L	100	6/13/2014 4:56:17 PM	R19253
Toluene	52	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Ethylbenzene	200	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Methyl tert-butyl ether (MTBE)	1200	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2,4-Trimethylbenzene	83	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,3,5-Trimethylbenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Naphthalene	68	20		µg/L	10	6/12/2014 12:48:19 AM	R19202
1-Methylnaphthalene	89	40		µg/L	10	6/12/2014 12:48:19 AM	R19202
2-Methylnaphthalene	ND	40		µg/L	10	6/12/2014 12:48:19 AM	R19202
Acetone	ND	100		µg/L	10	6/12/2014 12:48:19 AM	R19202
Bromobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Bromodichloromethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Bromoform	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Bromomethane	ND	30		µg/L	10	6/12/2014 12:48:19 AM	R19202
2-Butanone	ND	100		µg/L	10	6/12/2014 12:48:19 AM	R19202
Carbon disulfide	ND	100		µg/L	10	6/12/2014 12:48:19 AM	R19202
Carbon Tetrachloride	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Chlorobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Chloroethane	ND	20		µg/L	10	6/12/2014 12:48:19 AM	R19202
Chloroform	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Chloromethane	ND	30		µg/L	10	6/12/2014 12:48:19 AM	R19202
2-Chlorotoluene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
4-Chlorotoluene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
cis-1,2-DCE	14	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/12/2014 12:48:19 AM	R19202
Dibromochloromethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Dibromomethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2-Dichlorobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 5:30:00 PM
Lab ID: 1406364-004
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,4-Dichlorobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Dichlorodifluoromethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1-Dichloroethane	26	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1-Dichloroethene	41	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2-Dichloropropane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,3-Dichloropropane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
2,2-Dichloropropane	ND	20		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1-Dichloropropene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Hexachlorobutadiene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
2-Hexanone	ND	100		µg/L	10	6/12/2014 12:48:19 AM	R19202
Isopropylbenzene	17	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
4-Isopropyltoluene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
4-Methyl-2-pentanone	ND	100		µg/L	10	6/12/2014 12:48:19 AM	R19202
Methylene Chloride	ND	30		µg/L	10	6/12/2014 12:48:19 AM	R19202
n-Butylbenzene	ND	30		µg/L	10	6/12/2014 12:48:19 AM	R19202
n-Propylbenzene	33	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
sec-Butylbenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Styrene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
tert-Butylbenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/12/2014 12:48:19 AM	R19202
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
trans-1,2-DCE	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1,1-Trichloroethane	65	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,1,2-Trichloroethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Trichloroethene (TCE)	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Trichlorofluoromethane	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
1,2,3-Trichloropropane	ND	20		µg/L	10	6/12/2014 12:48:19 AM	R19202
Vinyl chloride	ND	10		µg/L	10	6/12/2014 12:48:19 AM	R19202
Xylenes, Total	98	15		µg/L	10	6/12/2014 12:48:19 AM	R19202
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	10	6/12/2014 12:48:19 AM	R19202
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	10	6/12/2014 12:48:19 AM	R19202
Surr: Dibromofluoromethane	102	70-130		%REC	10	6/12/2014 12:48:19 AM	R19202
Surr: Toluene-d8	101	70-130		%REC	10	6/12/2014 12:48:19 AM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 5:30:00 PM
Lab ID: 1406364-004
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	6.2	0.50		mg/L	10	6/12/2014 12:48:19 AM	R19202
Surr: BFB	98.4	70-130		%REC	10	6/12/2014 12:48:19 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 7:45:00 AM
Lab ID: 1406364-005
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	5.5	1.0		mg/L	1	6/12/2014 12:38:05 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 12:38:05 AM	13583
Surr: DNOP	114	62.7-145		%REC	1	6/12/2014 12:38:05 AM	13583
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	8.1	0.10	*	mg/L	50	6/12/2014 5:33:22 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 4:53:31 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 4:53:31 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 4:53:31 PM	R19227
Iron	18	1.0	*	mg/L	50	6/12/2014 5:33:22 PM	R19227
Manganese	9.2	0.10	*	mg/L	50	6/12/2014 5:33:22 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 4:53:31 PM	R19227
Zinc	ND	0.010		mg/L	1	6/12/2014 4:53:31 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	7.7	0.040	*	mg/L	20	6/18/2014 1:33:30 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:27:27 PM	13717
Calcium	410	5.0		mg/L	5	6/18/2014 1:32:02 PM	13717
Chromium	ND	0.0060		mg/L	1	6/17/2014 2:27:27 PM	13717
Copper	ND	0.0060		mg/L	1	6/17/2014 2:27:27 PM	13717
Iron	25	2.0	*	mg/L	100	6/18/2014 1:34:55 PM	13717
Magnesium	120	5.0		mg/L	5	6/18/2014 1:32:02 PM	13717
Manganese	9.5	0.040	*	mg/L	20	6/18/2014 1:33:30 PM	13717
Potassium	4.0	1.0		mg/L	1	6/17/2014 2:27:27 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 6:07:32 PM	13717
Sodium	490	20		mg/L	20	6/18/2014 6:09:15 PM	13717
Zinc	ND	0.010		mg/L	1	6/18/2014 1:30:27 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/18/2014 4:03:10 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 4:03:10 PM	R19364
Selenium	0.011	0.0050		mg/L	5	6/20/2014 4:01:01 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:40:17 PM	R19508
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/17/2014 4:19:32 PM	13717
Lead	ND	0.0050		mg/L	5	6/17/2014 4:19:32 PM	13717
Selenium	0.0061	0.0050		mg/L	5	6/17/2014 4:19:32 PM	13717
Uranium	ND	0.0050		mg/L	5	6/17/2014 4:19:32 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 10:28:47 AM	13740

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 7:45:00 AM
Lab ID: 1406364-005
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Aniline	75	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Anthracene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Azobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Benzoic acid	ND	20		µg/L	1	6/10/2014 10:09:47 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Carbazole	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Chrysene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2014 10:09:47 PM	13597
2,4-Dimethylphenol	110	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2014 10:09:47 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2014 10:09:47 PM	13597

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 7:45:00 AM
Lab ID: 1406364-005
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Fluoranthene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Fluorene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Isophorone	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
1-Methylnaphthalene	40	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2-Methylnaphthalene	53	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2-Methylphenol	490	80		µg/L	4	6/12/2014 1:40:31 PM	13597
3+4-Methylphenol	610	40		µg/L	4	6/12/2014 1:40:31 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Naphthalene	140	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/10/2014 10:09:47 PM	13597
Phenanthrene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Phenol	370	40		µg/L	4	6/12/2014 1:40:31 PM	13597
Pyrene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Pyridine	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2014 10:09:47 PM	13597
Surr: 2-Fluorophenol	19.6	12.1-85.8		%REC	1	6/10/2014 10:09:47 PM	13597
Surr: Phenol-d5	49.4	17.7-65.8		%REC	1	6/10/2014 10:09:47 PM	13597
Surr: 2,4,6-Tribromophenol	67.3	26-138		%REC	1	6/10/2014 10:09:47 PM	13597
Surr: Nitrobenzene-d5	82.5	47.5-119		%REC	1	6/10/2014 10:09:47 PM	13597
Surr: 2-Fluorobiphenyl	85.9	48.1-106		%REC	1	6/10/2014 10:09:47 PM	13597
Surr: 4-Terphenyl-d14	80.6	44-113		%REC	1	6/10/2014 10:09:47 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 7:45:00 AM
Lab ID: 1406364-005
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	12000	200		µg/L	200	6/13/2014 5:25:06 PM	R19253
Toluene	14000	200		µg/L	200	6/13/2014 5:25:06 PM	R19253
Ethylbenzene	740	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Methyl tert-butyl ether (MTBE)	19	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2,4-Trimethylbenzene	270	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,3,5-Trimethylbenzene	65	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Naphthalene	79	20		µg/L	10	6/12/2014 1:16:58 AM	R19202
1-Methylnaphthalene	ND	40		µg/L	10	6/12/2014 1:16:58 AM	R19202
2-Methylnaphthalene	ND	40		µg/L	10	6/12/2014 1:16:58 AM	R19202
Acetone	210	100		µg/L	10	6/12/2014 1:16:58 AM	R19202
Bromobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Bromodichloromethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Bromoform	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Bromomethane	ND	30		µg/L	10	6/12/2014 1:16:58 AM	R19202
2-Butanone	1800	100		µg/L	10	6/12/2014 1:16:58 AM	R19202
Carbon disulfide	ND	100		µg/L	10	6/12/2014 1:16:58 AM	R19202
Carbon Tetrachloride	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Chlorobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Chloroethane	ND	20		µg/L	10	6/12/2014 1:16:58 AM	R19202
Chloroform	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Chloromethane	ND	30		µg/L	10	6/12/2014 1:16:58 AM	R19202
2-Chlorotoluene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
4-Chlorotoluene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
cis-1,2-DCE	33	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/12/2014 1:16:58 AM	R19202
Dibromochloromethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Dibromomethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2-Dichlorobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,3-Dichlorobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,4-Dichlorobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Dichlorodifluoromethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,1-Dichloroethane	51	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,1-Dichloroethene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2-Dichloropropane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,3-Dichloropropane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
2,2-Dichloropropane	ND	20		µg/L	10	6/12/2014 1:16:58 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 7:45:00 AM
Lab ID: 1406364-005
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Hexachlorobutadiene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
2-Hexanone	ND	100		µg/L	10	6/12/2014 1:16:58 AM	R19202
Isopropylbenzene	19	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
4-Isopropyltoluene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
4-Methyl-2-pentanone	ND	100		µg/L	10	6/12/2014 1:16:58 AM	R19202
Methylene Chloride	ND	30		µg/L	10	6/12/2014 1:16:58 AM	R19202
n-Butylbenzene	ND	30		µg/L	10	6/12/2014 1:16:58 AM	R19202
n-Propylbenzene	38	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
sec-Butylbenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Styrene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
tert-Butylbenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/12/2014 1:16:58 AM	R19202
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
trans-1,2-DCE	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,1,1-Trichloroethane	15	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,1,2-Trichloroethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Trichloroethene (TCE)	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Trichlorofluoromethane	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
1,2,3-Trichloropropane	ND	20		µg/L	10	6/12/2014 1:16:58 AM	R19202
Vinyl chloride	ND	10		µg/L	10	6/12/2014 1:16:58 AM	R19202
Xylenes, Total	3400	300		µg/L	200	6/13/2014 5:25:06 PM	R19253
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%REC	10	6/12/2014 1:16:58 AM	R19202
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	10	6/12/2014 1:16:58 AM	R19202
Surr: Dibromofluoromethane	103	70-130		%REC	10	6/12/2014 1:16:58 AM	R19202
Surr: Toluene-d8	101	70-130		%REC	10	6/12/2014 1:16:58 AM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	64	10		mg/L	200	6/13/2014 5:25:06 PM	R19253
Surr: BFB	93.4	70-130		%REC	200	6/13/2014 5:25:06 PM	R19253

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: MKTF-11
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:15:00 PM
Lab ID: 1406364-006
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.6	1.0		mg/L	1	6/12/2014 1:07:48 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 1:07:48 AM	13583
Surr: DNOP	90.9	62.7-145		%REC	1	6/12/2014 1:07:48 AM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	7.0	2.0	*	mg/L	20	6/9/2014 3:25:25 PM	R19161
Chloride	480	25		mg/L	50	6/11/2014 3:20:09 AM	R19191
Bromide	0.67	0.10		mg/L	1	6/9/2014 3:13:01 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 3:13:01 PM	R19161
Sulfate	11	0.50		mg/L	1	6/9/2014 3:13:01 PM	R19161
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/9/2014 11:02:21 PM	R19165
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.8	0.010		mg/L	5	6/12/2014 4:59:04 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 4:57:05 PM	R19227
Chromium	0.0060	0.0060		mg/L	1	6/12/2014 4:57:05 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 4:57:05 PM	R19227
Iron	11	1.0	*	mg/L	50	6/12/2014 5:35:16 PM	R19227
Manganese	3.6	0.010	*	mg/L	5	6/12/2014 4:59:04 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 4:57:05 PM	R19227
Zinc	0.036	0.010		mg/L	1	6/12/2014 4:57:05 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.2	0.010		mg/L	5	6/18/2014 1:43:58 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:29:17 PM	13717
Calcium	110	5.0		mg/L	5	6/18/2014 1:43:58 PM	13717
Chromium	0.0061	0.0060		mg/L	1	6/17/2014 2:29:17 PM	13717
Copper	ND	0.0060		mg/L	1	6/17/2014 2:29:17 PM	13717
Iron	8.8	0.20	*	mg/L	10	6/18/2014 1:45:24 PM	13717
Magnesium	31	1.0		mg/L	1	6/17/2014 2:29:17 PM	13717
Manganese	2.8	0.010	*	mg/L	5	6/18/2014 1:43:58 PM	13717
Potassium	4.7	1.0		mg/L	1	6/17/2014 2:29:17 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 6:16:18 PM	13717
Sodium	530	10		mg/L	10	6/18/2014 6:18:02 PM	13717
Zinc	0.038	0.010		mg/L	1	6/18/2014 1:42:19 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0064	0.0050		mg/L	5	6/18/2014 4:08:09 PM	R19364
Lead	0.022	0.0050	*	mg/L	5	6/18/2014 4:08:09 PM	R19364
Selenium	0.010	0.0050		mg/L	5	6/20/2014 4:04:05 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:42:44 PM	R19508

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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1406364-006
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0063	0.0050		mg/L	5	6/17/2014 4:24:31 PM	13717
Lead	0.0093	0.0050		mg/L	5	6/17/2014 4:24:31 PM	13717
Selenium	0.0055	0.0050		mg/L	5	6/17/2014 4:24:31 PM	13717
Uranium	ND	0.0050		mg/L	5	6/17/2014 4:24:31 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 12:20:26 PM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Aniline	25	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Anthracene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Azobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Benzoic acid	ND	20		µg/L	1	6/10/2014 10:38:45 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Carbazole	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Chrysene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2014 10:38:45 PM	13597
2,4-Dimethylphenol	92	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2014 10:38:45 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2014 10:38:45 PM	13597
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Fluoranthene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Fluorene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Isophorone	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
1-Methylnaphthalene	11	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2-Methylphenol	180	20		µg/L	1	6/10/2014 10:38:45 PM	13597
3+4-Methylphenol	130	10		µg/L	1	6/10/2014 10:38:45 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Naphthalene	46	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/10/2014 10:38:45 PM	13597
Phenanthrene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Phenol	32	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Pyrene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Pyridine	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597

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Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2014 10:38:45 PM	13597
Surr: 2-Fluorophenol	25.6	12.1-85.8		%REC	1	6/10/2014 10:38:45 PM	13597
Surr: Phenol-d5	39.0	17.7-65.8		%REC	1	6/10/2014 10:38:45 PM	13597
Surr: 2,4,6-Tribromophenol	57.0	26-138		%REC	1	6/10/2014 10:38:45 PM	13597
Surr: Nitrobenzene-d5	74.7	47.5-119		%REC	1	6/10/2014 10:38:45 PM	13597
Surr: 2-Fluorobiphenyl	71.5	48.1-106		%REC	1	6/10/2014 10:38:45 PM	13597
Surr: 4-Terphenyl-d14	69.9	44-113		%REC	1	6/10/2014 10:38:45 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	12000	200		µg/L	200	6/13/2014 5:53:52 PM	R19253
Toluene	7800	200		µg/L	200	6/13/2014 5:53:52 PM	R19253
Ethylbenzene	750	200		µg/L	200	6/13/2014 5:53:52 PM	R19253
Methyl tert-butyl ether (MTBE)	96	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2,4-Trimethylbenzene	270	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,3,5-Trimethylbenzene	52	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Naphthalene	66	10		µg/L	5	6/12/2014 1:45:36 AM	R19202
1-Methylnaphthalene	ND	20		µg/L	5	6/12/2014 1:45:36 AM	R19202
2-Methylnaphthalene	ND	20		µg/L	5	6/12/2014 1:45:36 AM	R19202
Acetone	290	50		µg/L	5	6/12/2014 1:45:36 AM	R19202
Bromobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Bromodichloromethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Bromoform	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Bromomethane	ND	15		µg/L	5	6/12/2014 1:45:36 AM	R19202
2-Butanone	170	50		µg/L	5	6/12/2014 1:45:36 AM	R19202
Carbon disulfide	ND	50		µg/L	5	6/12/2014 1:45:36 AM	R19202
Carbon Tetrachloride	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Chlorobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Chloroethane	ND	10		µg/L	5	6/12/2014 1:45:36 AM	R19202
Chloroform	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Chloromethane	ND	15		µg/L	5	6/12/2014 1:45:36 AM	R19202
2-Chlorotoluene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
4-Chlorotoluene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
cis-1,2-DCE	16	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/12/2014 1:45:36 AM	R19202
Dibromochloromethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Dibromomethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1-Dichloroethane	53	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1-Dichloroethene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2-Dichloropropane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,3-Dichloropropane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
2,2-Dichloropropane	ND	10		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1-Dichloropropene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Hexachlorobutadiene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
2-Hexanone	ND	50		µg/L	5	6/12/2014 1:45:36 AM	R19202
Isopropylbenzene	29	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
4-Isopropyltoluene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
4-Methyl-2-pentanone	ND	50		µg/L	5	6/12/2014 1:45:36 AM	R19202
Methylene Chloride	ND	15		µg/L	5	6/12/2014 1:45:36 AM	R19202
n-Butylbenzene	ND	15		µg/L	5	6/12/2014 1:45:36 AM	R19202
n-Propylbenzene	68	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
sec-Butylbenzene	7.8	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Styrene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
tert-Butylbenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/12/2014 1:45:36 AM	R19202
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
trans-1,2-DCE	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1,1-Trichloroethane	14	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Trichlorofluoromethane	ND	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
1,2,3-Trichloropropane	ND	10		µg/L	5	6/12/2014 1:45:36 AM	R19202
Vinyl chloride	18	5.0		µg/L	5	6/12/2014 1:45:36 AM	R19202
Xylenes, Total	2200	300		µg/L	200	6/13/2014 5:53:52 PM	R19253
Surr: 1,2-Dichloroethane-d4	89.1	70-130		%REC	5	6/12/2014 1:45:36 AM	R19202
Surr: 4-Bromofluorobenzene	86.3	70-130		%REC	5	6/12/2014 1:45:36 AM	R19202
Surr: Dibromofluoromethane	97.3	70-130		%REC	5	6/12/2014 1:45:36 AM	R19202
Surr: Toluene-d8	97.6	70-130		%REC	5	6/12/2014 1:45:36 AM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:15:00 PM
Lab ID: 1406364-006
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	48	10		mg/L	200	6/13/2014 5:53:52 PM	R19253
Surr: BFB	92.6	70-130		%REC	200	6/13/2014 5:53:52 PM	R19253

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:00:00 PM
Lab ID: 1406364-007
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	10	1.0		mg/L	1	6/12/2014 1:37:49 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 1:37:49 AM	13583
Surr: DNOP	114	62.7-145		%REC	1	6/12/2014 1:37:49 AM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	ND	2.0		mg/L	20	6/9/2014 3:50:15 PM	R19161
Chloride	5200	500		mg/L	1E	6/20/2014 11:43:00 AM	R19420
Bromide	ND	2.0		mg/L	20	6/9/2014 3:50:15 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 3:37:50 PM	R19161
Sulfate	1.2	0.50		mg/L	1	6/9/2014 3:37:50 PM	R19161
Nitrate+Nitrite as N	ND	4.0		mg/L	20	6/11/2014 3:57:23 AM	R19191
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	25	0.10	*	mg/L	50	6/13/2014 3:25:41 PM	R19281
Cadmium	ND	0.0020		mg/L	1	6/12/2014 5:07:45 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 5:07:45 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 5:07:45 PM	R19227
Iron	11	1.0	*	mg/L	50	6/13/2014 3:25:41 PM	R19281
Manganese	7.5	0.10	*	mg/L	50	6/13/2014 3:25:41 PM	R19281
Silver	ND	0.0050		mg/L	1	6/12/2014 5:07:45 PM	R19227
Zinc	0.011	0.010		mg/L	1	6/12/2014 5:07:45 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	25	0.10	*	mg/L	50	6/18/2014 1:49:55 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:31:13 PM	13717
Calcium	880	10		mg/L	10	6/18/2014 1:48:28 PM	13717
Chromium	0.0074	0.0060		mg/L	1	6/17/2014 2:31:13 PM	13717
Copper	ND	0.0060		mg/L	1	6/17/2014 2:31:13 PM	13717
Iron	11	1.0	*	mg/L	50	6/18/2014 1:49:55 PM	13717
Magnesium	260	10		mg/L	10	6/18/2014 1:48:28 PM	13717
Manganese	7.9	0.020	*	mg/L	10	6/18/2014 1:48:28 PM	13717
Potassium	14	1.0		mg/L	1	6/17/2014 2:31:13 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 6:19:44 PM	13717
Sodium	2400	50		mg/L	50	6/18/2014 6:21:30 PM	13717
Zinc	0.017	0.010		mg/L	1	6/18/2014 1:46:49 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/18/2014 4:13:09 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 4:13:09 PM	R19364
Selenium	ND	0.010		mg/L	10	6/25/2014 2:10:58 PM	R19508
Uranium	ND	0.010		mg/L	10	6/25/2014 12:45:08 PM	R19508

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:00:00 PM
Lab ID: 1406364-007
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/17/2014 5:54:24 PM	13717
Lead	0.011	0.0050		mg/L	5	6/17/2014 4:29:30 PM	13717
Selenium	ND	0.010		mg/L	10	6/17/2014 5:54:24 PM	13717
Uranium	ND	0.0050		mg/L	5	6/17/2014 4:29:30 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 12:22:12 PM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Acenaphthylene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Aniline	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Anthracene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Azobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Benzoic acid	23	20		µg/L	1	6/12/2014 8:31:32 PM	13597
Benzyl alcohol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Carbazole	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4-Chloroaniline	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2-Chlorophenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Chrysene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Dibenzofuran	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:00:00 PM
Lab ID: 1406364-007
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Diethyl phthalate	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/12/2014 8:31:32 PM	13597
2,4-Dimethylphenol	13	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/12/2014 8:31:32 PM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/12/2014 8:31:32 PM	13597
2,4-Dinitrotoluene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Fluoranthene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Fluorene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Hexachloroethane	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Isophorone	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
1-Methylnaphthalene	21	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2-Methylnaphthalene	21	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2-Methylphenol	28	20		µg/L	1	6/12/2014 8:31:32 PM	13597
3+4-Methylphenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Naphthalene	50	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2-Nitroaniline	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
3-Nitroaniline	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4-Nitroaniline	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Nitrobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2-Nitrophenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
4-Nitrophenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Pentachlorophenol	ND	20		µg/L	1	6/12/2014 8:31:32 PM	13597
Phenanthrene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Phenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Pyrene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Pyridine	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:00:00 PM
Lab ID: 1406364-007
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/12/2014 8:31:32 PM	13597
Surr: 2-Fluorophenol	4.42	12.1-85.8	S	%REC	1	6/12/2014 8:31:32 PM	13597
Surr: Phenol-d5	17.3	17.7-65.8	S	%REC	1	6/12/2014 8:31:32 PM	13597
Surr: 2,4,6-Tribromophenol	14.4	26-138	S	%REC	1	6/12/2014 8:31:32 PM	13597
Surr: Nitrobenzene-d5	101	47.5-119		%REC	1	6/12/2014 8:31:32 PM	13597
Surr: 2-Fluorobiphenyl	97.7	48.1-106		%REC	1	6/12/2014 8:31:32 PM	13597
Surr: 4-Terphenyl-d14	89.9	44-113		%REC	1	6/12/2014 8:31:32 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	12000	200		µg/L	200	6/13/2014 6:22:38 PM	R19253
Toluene	8800	200		µg/L	200	6/13/2014 6:22:38 PM	R19253
Ethylbenzene	1300	200		µg/L	200	6/13/2014 6:22:38 PM	R19253
Methyl tert-butyl ether (MTBE)	270	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2,4-Trimethylbenzene	330	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,3,5-Trimethylbenzene	95	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Naphthalene	80	10		µg/L	5	6/12/2014 2:14:21 AM	R19202
1-Methylnaphthalene	30	20		µg/L	5	6/12/2014 2:14:21 AM	R19202
2-Methylnaphthalene	35	20		µg/L	5	6/12/2014 2:14:21 AM	R19202
Acetone	290	50		µg/L	5	6/12/2014 2:14:21 AM	R19202
Bromobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Bromodichloromethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Bromoform	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Bromomethane	ND	15		µg/L	5	6/12/2014 2:14:21 AM	R19202
2-Butanone	62	50		µg/L	5	6/12/2014 2:14:21 AM	R19202
Carbon disulfide	ND	50		µg/L	5	6/12/2014 2:14:21 AM	R19202
Carbon Tetrachloride	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Chlorobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Chloroethane	ND	10		µg/L	5	6/12/2014 2:14:21 AM	R19202
Chloroform	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Chloromethane	ND	15		µg/L	5	6/12/2014 2:14:21 AM	R19202
2-Chlorotoluene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
4-Chlorotoluene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
cis-1,2-DCE	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/12/2014 2:14:21 AM	R19202
Dibromochloromethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Dibromomethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:00:00 PM
Lab ID: 1406364-007
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1-Dichloroethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1-Dichloroethene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2-Dichloropropane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,3-Dichloropropane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
2,2-Dichloropropane	ND	10		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1-Dichloropropene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Hexachlorobutadiene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
2-Hexanone	ND	50		µg/L	5	6/12/2014 2:14:21 AM	R19202
Isopropylbenzene	59	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
4-Isopropyltoluene	5.9	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
4-Methyl-2-pentanone	ND	50		µg/L	5	6/12/2014 2:14:21 AM	R19202
Methylene Chloride	ND	15		µg/L	5	6/12/2014 2:14:21 AM	R19202
n-Butylbenzene	ND	15		µg/L	5	6/12/2014 2:14:21 AM	R19202
n-Propylbenzene	97	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
sec-Butylbenzene	12	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Styrene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
tert-Butylbenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/12/2014 2:14:21 AM	R19202
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
trans-1,2-DCE	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Trichlorofluoromethane	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
1,2,3-Trichloropropane	ND	10		µg/L	5	6/12/2014 2:14:21 AM	R19202
Vinyl chloride	ND	5.0		µg/L	5	6/12/2014 2:14:21 AM	R19202
Xylenes, Total	3700	300		µg/L	200	6/13/2014 6:22:38 PM	R19253
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	5	6/12/2014 2:14:21 AM	R19202
Surr: 4-Bromofluorobenzene	82.0	70-130		%REC	5	6/12/2014 2:14:21 AM	R19202
Surr: Dibromofluoromethane	97.2	70-130		%REC	5	6/12/2014 2:14:21 AM	R19202
Surr: Toluene-d8	107	70-130		%REC	5	6/12/2014 2:14:21 AM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 3:00:00 PM
Lab ID: 1406364-007
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	57	10		mg/L	200	6/13/2014 6:22:38 PM	R19253
Surr: BFB	94.2	70-130		%REC	200	6/13/2014 6:22:38 PM	R19253

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 4:35:00 PM
Lab ID: 1406364-008
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	5.7	1.0		mg/L	1	6/12/2014 2:07:54 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 2:07:54 AM	13583
Surr: DNOP	116	62.7-145		%REC	1	6/12/2014 2:07:54 AM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	1.1	0.50		mg/L	5	6/9/2014 4:02:40 PM	R19161
Chloride	540	25		mg/L	50	6/11/2014 3:44:58 AM	R19191
Bromide	1.7	0.50		mg/L	5	6/9/2014 4:02:40 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	6/9/2014 4:02:40 PM	R19161
Sulfate	ND	2.5		mg/L	5	6/9/2014 4:02:40 PM	R19161
Nitrate+Nitrite as N	ND	1.0	H	mg/L	5	6/9/2014 4:02:40 PM	R19161
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.81	0.0020		mg/L	1	6/12/2014 5:11:06 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 5:11:06 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 5:11:06 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 5:11:06 PM	R19227
Iron	7.9	0.20	*	mg/L	10	6/13/2014 3:34:56 PM	R19281
Manganese	1.3	0.010	*	mg/L	5	6/12/2014 5:12:55 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 5:11:06 PM	R19227
Zinc	0.022	0.010		mg/L	1	6/12/2014 5:11:06 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.90	0.0020		mg/L	1	6/17/2014 2:33:00 PM	13717
Cadmium	ND	0.0020		mg/L	1	6/17/2014 2:33:00 PM	13717
Calcium	68	1.0		mg/L	1	6/17/2014 2:33:00 PM	13717
Chromium	ND	0.0060		mg/L	1	6/17/2014 2:33:00 PM	13717
Copper	0.0080	0.0060		mg/L	1	6/17/2014 2:33:00 PM	13717
Iron	7.9	0.20	*	mg/L	10	6/18/2014 1:53:06 PM	13717
Magnesium	17	1.0		mg/L	1	6/17/2014 2:33:00 PM	13717
Manganese	1.2	0.020	*	mg/L	10	6/18/2014 1:53:06 PM	13717
Potassium	5.2	1.0		mg/L	1	6/17/2014 2:33:00 PM	13717
Silver	ND	0.0050		mg/L	1	6/18/2014 6:23:29 PM	13717
Sodium	740	10		mg/L	10	6/18/2014 6:25:10 PM	13717
Zinc	0.089	0.010		mg/L	1	6/18/2014 1:51:31 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.013	0.0050	*	mg/L	5	6/18/2014 4:38:10 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 4:38:10 PM	R19364
Selenium	0.017	0.0050		mg/L	5	6/20/2014 4:10:08 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:47:33 PM	R19508

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 4:35:00 PM
Lab ID: 1406364-008
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.023	0.0050	*	mg/L	5	6/17/2014 4:34:29 PM	13717
Lead	ND	0.0050		mg/L	5	6/17/2014 4:34:29 PM	13717
Selenium	0.013	0.0050		mg/L	5	6/17/2014 4:34:29 PM	13717
Uranium	0.015	0.0050		mg/L	5	6/17/2014 4:34:29 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 10:34:09 AM	13740
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	18000	500		µg/L	500	6/13/2014 6:51:20 PM	R19253
Toluene	3700	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Ethylbenzene	1700	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Methyl tert-butyl ether (MTBE)	2000	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2,4-Trimethylbenzene	1200	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,3,5-Trimethylbenzene	360	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Naphthalene	240	100		µg/L	50	6/13/2014 7:20:03 PM	R19253
1-Methylnaphthalene	ND	200		µg/L	50	6/13/2014 7:20:03 PM	R19253
2-Methylnaphthalene	ND	200		µg/L	50	6/13/2014 7:20:03 PM	R19253
Acetone	ND	500		µg/L	50	6/13/2014 7:20:03 PM	R19253
Bromobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Bromodichloromethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Bromoform	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Bromomethane	ND	150		µg/L	50	6/13/2014 7:20:03 PM	R19253
2-Butanone	ND	500		µg/L	50	6/13/2014 7:20:03 PM	R19253
Carbon disulfide	ND	500		µg/L	50	6/13/2014 7:20:03 PM	R19253
Carbon Tetrachloride	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Chlorobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Chloroethane	ND	100		µg/L	50	6/13/2014 7:20:03 PM	R19253
Chloroform	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Chloromethane	ND	150		µg/L	50	6/13/2014 7:20:03 PM	R19253
2-Chlorotoluene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
4-Chlorotoluene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
cis-1,2-DCE	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/13/2014 7:20:03 PM	R19253
Dibromochloromethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Dibromomethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2-Dichlorobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 4:35:00 PM
Lab ID: 1406364-008
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,4-Dichlorobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Dichlorodifluoromethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1-Dichloroethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1-Dichloroethene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2-Dichloropropane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,3-Dichloropropane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
2,2-Dichloropropane	ND	100		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1-Dichloropropene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Hexachlorobutadiene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
2-Hexanone	ND	500		µg/L	50	6/13/2014 7:20:03 PM	R19253
Isopropylbenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
4-Isopropyltoluene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
4-Methyl-2-pentanone	ND	500		µg/L	50	6/13/2014 7:20:03 PM	R19253
Methylene Chloride	ND	150		µg/L	50	6/13/2014 7:20:03 PM	R19253
n-Butylbenzene	ND	150		µg/L	50	6/13/2014 7:20:03 PM	R19253
n-Propylbenzene	150	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
sec-Butylbenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Styrene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
tert-Butylbenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/13/2014 7:20:03 PM	R19253
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
trans-1,2-DCE	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1,1-Trichloroethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,1,2-Trichloroethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Trichloroethene (TCE)	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Trichlorofluoromethane	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
1,2,3-Trichloropropane	ND	100		µg/L	50	6/13/2014 7:20:03 PM	R19253
Vinyl chloride	ND	50		µg/L	50	6/13/2014 7:20:03 PM	R19253
Xylenes, Total	8100	75		µg/L	50	6/13/2014 7:20:03 PM	R19253
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%REC	50	6/13/2014 7:20:03 PM	R19253
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	50	6/13/2014 7:20:03 PM	R19253
Surr: Dibromofluoromethane	107	70-130		%REC	50	6/13/2014 7:20:03 PM	R19253
Surr: Toluene-d8	96.7	70-130		%REC	50	6/13/2014 7:20:03 PM	R19253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 4:35:00 PM
Lab ID: 1406364-008
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	71	2.5		mg/L	50	6/13/2014 7:20:03 PM	R19253
Surr: BFB	97.5	70-130		%REC	50	6/13/2014 7:20:03 PM	R19253

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 10:15:00 AM
Lab ID: 1406364-009
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	4.2	1.0		mg/L	1	6/12/2014 2:37:26 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 2:37:26 AM	13583
Surr: DNOP	97.8	62.7-145		%REC	1	6/12/2014 2:37:26 AM	13583
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	2600	100	p	µg/L	100	6/13/2014 9:14:56 PM	R19253
Toluene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Ethylbenzene	480	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Methyl tert-butyl ether (MTBE)	1100	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2,4-Trimethylbenzene	64	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,3,5-Trimethylbenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2-Dichloroethane (EDC)	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2-Dibromoethane (EDB)	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Naphthalene	ND	20	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1-Methylnaphthalene	ND	40	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
2-Methylnaphthalene	ND	40	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Acetone	ND	100	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Bromobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Bromodichloromethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Bromoform	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Bromomethane	ND	30	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
2-Butanone	ND	100	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Carbon disulfide	ND	100	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Carbon Tetrachloride	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Chlorobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Chloroethane	ND	20	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Chloroform	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Chloromethane	ND	30	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
2-Chlorotoluene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
4-Chlorotoluene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
cis-1,2-DCE	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
cis-1,3-Dichloropropene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2-Dibromo-3-chloropropane	ND	20	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Dibromochloromethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Dibromomethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2-Dichlorobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,3-Dichlorobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,4-Dichlorobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Dichlorodifluoromethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,1-Dichloroethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 10:15:00 AM
Lab ID: 1406364-009
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
1,1-Dichloroethene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2-Dichloropropane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,3-Dichloropropane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
2,2-Dichloropropane	ND	20	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,1-Dichloropropene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Hexachlorobutadiene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
2-Hexanone	ND	100	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Isopropylbenzene	30	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
4-Isopropyltoluene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
4-Methyl-2-pentanone	ND	100	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Methylene Chloride	ND	30	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
n-Butylbenzene	ND	30	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
n-Propylbenzene	60	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
sec-Butylbenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Styrene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
tert-Butylbenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,1,1,2-Tetrachloroethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,1,2,2-Tetrachloroethane	ND	20	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Tetrachloroethene (PCE)	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
trans-1,2-DCE	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
trans-1,3-Dichloropropene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2,3-Trichlorobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2,4-Trichlorobenzene	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,1,1-Trichloroethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,1,2-Trichloroethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Trichloroethene (TCE)	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Trichlorofluoromethane	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
1,2,3-Trichloropropane	ND	20	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Vinyl chloride	ND	10	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Xylenes, Total	68	15	p	µg/L	10	6/13/2014 9:43:39 PM	R19253
Surr: 1,2-Dichloroethane-d4	93.2	70-130	p	%REC	10	6/13/2014 9:43:39 PM	R19253
Surr: 4-Bromofluorobenzene	87.1	70-130	p	%REC	10	6/13/2014 9:43:39 PM	R19253
Surr: Dibromofluoromethane	101	70-130	p	%REC	10	6/13/2014 9:43:39 PM	R19253
Surr: Toluene-d8	97.4	70-130	p	%REC	10	6/13/2014 9:43:39 PM	R19253
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**cadg**
Gasoline Range Organics (GRO)	8.3	0.50	p	mg/L	10	6/13/2014 9:43:39 PM	R19253
Surr: BFB	91.0	70-130	p	%REC	10	6/13/2014 9:43:39 PM	R19253

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 9:20:00 AM
Lab ID: 1406364-010
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	7.8	1.0		mg/L	1	6/12/2014 3:07:03 AM	13583
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/12/2014 3:07:03 AM	13583
Surr: DNOP	132	62.7-145		%REC	1	6/12/2014 3:07:03 AM	13583
EPA METHOD 300.0: ANIONS						Analyst:	**JRR**
Fluoride	0.65	0.10		mg/L	1	6/9/2014 4:27:29 PM	R19161
Chloride	170	10		mg/L	20	6/9/2014 4:39:53 PM	R19161
Bromide	0.81	0.10		mg/L	1	6/9/2014 4:27:29 PM	R19161
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/9/2014 4:27:29 PM	R19161
Sulfate	0.95	0.50		mg/L	1	6/9/2014 4:27:29 PM	R19161
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/10/2014 12:19:02 AM	R19161
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.4	0.010	*	mg/L	5	6/12/2014 5:16:20 PM	R19227
Cadmium	ND	0.0020		mg/L	1	6/12/2014 5:14:35 PM	R19227
Chromium	ND	0.0060		mg/L	1	6/12/2014 5:14:35 PM	R19227
Copper	ND	0.0060		mg/L	1	6/12/2014 5:14:35 PM	R19227
Iron	4.5	0.10	*	mg/L	5	6/12/2014 5:16:20 PM	R19227
Manganese	2.0	0.010	*	mg/L	5	6/12/2014 5:16:20 PM	R19227
Silver	ND	0.0050		mg/L	1	6/12/2014 5:14:35 PM	R19227
Zinc	ND	0.010		mg/L	1	6/12/2014 5:14:35 PM	R19227
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	19	0.040	*	mg/L	20	6/18/2014 2:11:41 PM	13717
Cadmium	ND	0.010		mg/L	5	6/18/2014 2:10:14 PM	13717
Calcium	890	20		mg/L	20	6/18/2014 2:11:41 PM	13717
Chromium	0.11	0.030	*	mg/L	5	6/18/2014 2:10:14 PM	13717
Copper	0.12	0.030		mg/L	5	6/18/2014 2:10:14 PM	13717
Iron	81	2.0	*	mg/L	100	6/18/2014 2:13:05 PM	13717
Magnesium	100	5.0		mg/L	5	6/18/2014 2:10:14 PM	13717
Manganese	17	0.040	*	mg/L	20	6/18/2014 2:11:41 PM	13717
Potassium	11	5.0		mg/L	5	6/18/2014 2:10:14 PM	13717
Silver	ND	0.025		mg/L	5	6/18/2014 2:10:14 PM	13717
Sodium	250	5.0		mg/L	5	6/18/2014 6:26:51 PM	13717
Zinc	0.31	0.050		mg/L	5	6/18/2014 2:10:14 PM	13717
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/18/2014 4:43:10 PM	R19364
Lead	ND	0.0050		mg/L	5	6/18/2014 4:43:10 PM	R19364
Selenium	0.0086	0.0050		mg/L	5	6/20/2014 4:13:10 PM	R19449
Uranium	ND	0.010		mg/L	10	6/25/2014 12:49:57 PM	R19508

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 9:20:00 AM
Lab ID: 1406364-010
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.013	0.0050	*	mg/L	5	6/26/2014 4:26:48 PM	13717
Lead	0.29	0.020	*	mg/L	20	6/20/2014 11:59:14 AM	13717
Selenium	0.013	0.0050		mg/L	5	6/26/2014 4:26:48 PM	13717
Uranium	0.022	0.0050		mg/L	5	6/17/2014 4:39:29 PM	13717
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	6/18/2014 12:23:57 PM	13740
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Acenaphthylene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Aniline	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Anthracene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Azobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Benz(a)anthracene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Benzo(a)pyrene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Benzo(b)fluoranthene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Benzo(g,h,i)perylene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Benzo(k)fluoranthene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Benzoic acid	ND	29		µg/L	1	6/10/2014 11:36:58 PM	13597
Benzyl alcohol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Bis(2-chloroethoxy)methane	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Bis(2-chloroethyl)ether	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Bis(2-chloroisopropyl)ether	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Bis(2-ethylhexyl)phthalate	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4-Bromophenyl phenyl ether	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Butyl benzyl phthalate	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Carbazole	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4-Chloro-3-methylphenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4-Chloroaniline	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2-Chloronaphthalene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2-Chlorophenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4-Chlorophenyl phenyl ether	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Chrysene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Di-n-butyl phthalate	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Di-n-octyl phthalate	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Dibenz(a,h)anthracene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Dibenzofuran	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
1,2-Dichlorobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
1,3-Dichlorobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 9:20:00 AM
Lab ID: 1406364-010
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
3,3´-Dichlorobenzidine	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Diethyl phthalate	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Dimethyl phthalate	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2,4-Dichlorophenol	ND	29		µg/L	1	6/10/2014 11:36:58 PM	13597
2,4-Dimethylphenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4,6-Dinitro-2-methylphenol	ND	29		µg/L	1	6/10/2014 11:36:58 PM	13597
2,4-Dinitrophenol	ND	29		µg/L	1	6/10/2014 11:36:58 PM	13597
2,4-Dinitrotoluene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2,6-Dinitrotoluene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Fluoranthene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Fluorene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Hexachlorobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Hexachlorobutadiene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Hexachlorocyclopentadiene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Hexachloroethane	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Indeno(1,2,3-cd)pyrene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Isophorone	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
1-Methylnaphthalene	64	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2-Methylnaphthalene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2-Methylphenol	ND	29		µg/L	1	6/10/2014 11:36:58 PM	13597
3+4-Methylphenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
N-Nitrosodi-n-propylamine	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
N-Nitrosodimethylamine	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
N-Nitrosodiphenylamine	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Naphthalene	26	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2-Nitroaniline	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
3-Nitroaniline	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4-Nitroaniline	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Nitrobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2-Nitrophenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
4-Nitrophenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Pentachlorophenol	ND	29		µg/L	1	6/10/2014 11:36:58 PM	13597
Phenanthrene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Phenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Pyrene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Pyridine	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
1,2,4-Trichlorobenzene	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
2,4,5-Trichlorophenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 9:20:00 AM
Lab ID: 1406364-010
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	14		µg/L	1	6/10/2014 11:36:58 PM	13597
Surr: 2-Fluorophenol	38.9	12.1-85.8		%REC	1	6/10/2014 11:36:58 PM	13597
Surr: Phenol-d5	31.1	17.7-65.8		%REC	1	6/10/2014 11:36:58 PM	13597
Surr: 2,4,6-Tribromophenol	63.5	26-138		%REC	1	6/10/2014 11:36:58 PM	13597
Surr: Nitrobenzene-d5	67.0	47.5-119		%REC	1	6/10/2014 11:36:58 PM	13597
Surr: 2-Fluorobiphenyl	60.5	48.1-106		%REC	1	6/10/2014 11:36:58 PM	13597
Surr: 4-Terphenyl-d14	63.4	44-113		%REC	1	6/10/2014 11:36:58 PM	13597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	290	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Toluene	14	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Ethylbenzene	36	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Methyl tert-butyl ether (MTBE)	140	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2,4-Trimethylbenzene	88	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,3,5-Trimethylbenzene	29	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Naphthalene	68	10		µg/L	5	6/13/2014 8:17:26 PM	R19253
1-Methylnaphthalene	130	20		µg/L	5	6/13/2014 8:17:26 PM	R19253
2-Methylnaphthalene	28	20		µg/L	5	6/13/2014 8:17:26 PM	R19253
Acetone	ND	50		µg/L	5	6/13/2014 8:17:26 PM	R19253
Bromobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Bromodichloromethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Bromoform	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Bromomethane	ND	15		µg/L	5	6/13/2014 8:17:26 PM	R19253
2-Butanone	ND	50		µg/L	5	6/13/2014 8:17:26 PM	R19253
Carbon disulfide	ND	50		µg/L	5	6/13/2014 8:17:26 PM	R19253
Carbon Tetrachloride	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Chlorobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Chloroethane	ND	10		µg/L	5	6/13/2014 8:17:26 PM	R19253
Chloroform	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Chloromethane	ND	15		µg/L	5	6/13/2014 8:17:26 PM	R19253
2-Chlorotoluene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
4-Chlorotoluene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
cis-1,2-DCE	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/13/2014 8:17:26 PM	R19253
Dibromochloromethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Dibromomethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 9:20:00 AM
Lab ID: 1406364-010
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1-Dichloroethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1-Dichloroethene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2-Dichloropropane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,3-Dichloropropane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
2,2-Dichloropropane	ND	10		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1-Dichloropropene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Hexachlorobutadiene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
2-Hexanone	ND	50		µg/L	5	6/13/2014 8:17:26 PM	R19253
Isopropylbenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
4-Isopropyltoluene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
4-Methyl-2-pentanone	ND	50		µg/L	5	6/13/2014 8:17:26 PM	R19253
Methylene Chloride	ND	15		µg/L	5	6/13/2014 8:17:26 PM	R19253
n-Butylbenzene	ND	15		µg/L	5	6/13/2014 8:17:26 PM	R19253
n-Propylbenzene	6.6	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
sec-Butylbenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Styrene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
tert-Butylbenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/13/2014 8:17:26 PM	R19253
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
trans-1,2-DCE	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Trichlorofluoromethane	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
1,2,3-Trichloropropane	ND	10		µg/L	5	6/13/2014 8:17:26 PM	R19253
Vinyl chloride	ND	5.0		µg/L	5	6/13/2014 8:17:26 PM	R19253
Xylenes, Total	55	7.5		µg/L	5	6/13/2014 8:17:26 PM	R19253
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	5	6/13/2014 8:17:26 PM	R19253
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	5	6/13/2014 8:17:26 PM	R19253
Surr: Dibromofluoromethane	105	70-130		%REC	5	6/13/2014 8:17:26 PM	R19253
Surr: Toluene-d8	101	70-130		%REC	5	6/13/2014 8:17:26 PM	R19253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 2nd Quarter
Collection Date: 6/6/2014 9:20:00 AM
Lab ID: 1406364-010
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	2.2	0.25		mg/L	5	6/13/2014 8:17:26 PM	R19253
Surr: BFB	100	70-130		%REC	5	6/13/2014 8:17:26 PM	R19253

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-GROUP4-060414
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 5:00:00 PM
Lab ID: 1406364-011
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Toluene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Ethylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Naphthalene	ND	2.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1-Methylnaphthalene	ND	4.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
2-Methylnaphthalene	ND	4.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Acetone	ND	10		µg/L	1	6/13/2014 8:46:09 PM	R19253
Bromobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Bromodichloromethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Bromoform	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Bromomethane	ND	3.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
2-Butanone	ND	10		µg/L	1	6/13/2014 8:46:09 PM	R19253
Carbon disulfide	ND	10		µg/L	1	6/13/2014 8:46:09 PM	R19253
Carbon Tetrachloride	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Chlorobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Chloroethane	ND	2.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Chloroform	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Chloromethane	ND	3.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
2-Chlorotoluene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
4-Chlorotoluene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
cis-1,2-DCE	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Dibromochloromethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Dibromomethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,1-Dichloroethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,1-Dichloroethene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2-Dichloropropane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,3-Dichloropropane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
2,2-Dichloropropane	ND	2.0		µg/L	1	6/13/2014 8:46:09 PM	R19253

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-GROUP4-060414
Project: 2014 2nd Quarter
Collection Date: 6/4/2014 5:00:00 PM
Lab ID: 1406364-011
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Hexachlorobutadiene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
2-Hexanone	ND	10		µg/L	1	6/13/2014 8:46:09 PM	R19253
Isopropylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
4-Isopropyltoluene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
4-Methyl-2-pentanone	ND	10		µg/L	1	6/13/2014 8:46:09 PM	R19253
Methylene Chloride	ND	3.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
n-Butylbenzene	ND	3.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
n-Propylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
sec-Butylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Styrene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
tert-Butylbenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
trans-1,2-DCE	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Trichlorofluoromethane	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Vinyl chloride	ND	1.0		µg/L	1	6/13/2014 8:46:09 PM	R19253
Xylenes, Total	ND	1.5		µg/L	1	6/13/2014 8:46:09 PM	R19253
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	1	6/13/2014 8:46:09 PM	R19253
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/13/2014 8:46:09 PM	R19253
Surr: Dibromofluoromethane	111	70-130		%REC	1	6/13/2014 8:46:09 PM	R19253
Surr: Toluene-d8	99.7	70-130		%REC	1	6/13/2014 8:46:09 PM	R19253

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-#1-6/5/14
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 6:30:00 PM
Lab ID: 1406364-012
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Toluene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Ethylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Naphthalene	ND	2.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1-Methylnaphthalene	ND	4.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
2-Methylnaphthalene	ND	4.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Acetone	ND	10		µg/L	1	6/12/2014 4:38:00 AM	R19202
Bromobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Bromodichloromethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Bromoform	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Bromomethane	ND	3.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
2-Butanone	ND	10		µg/L	1	6/12/2014 4:38:00 AM	R19202
Carbon disulfide	ND	10		µg/L	1	6/12/2014 4:38:00 AM	R19202
Carbon Tetrachloride	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Chlorobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Chloroethane	ND	2.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Chloroform	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Chloromethane	ND	3.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
2-Chlorotoluene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
4-Chlorotoluene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
cis-1,2-DCE	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Dibromochloromethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Dibromomethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,1-Dichloroethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,1-Dichloroethene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2-Dichloropropane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,3-Dichloropropane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
2,2-Dichloropropane	ND	2.0		µg/L	1	6/12/2014 4:38:00 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-#1-6/5/14
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 6:30:00 PM
Lab ID: 1406364-012
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Hexachlorobutadiene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
2-Hexanone	ND	10		µg/L	1	6/12/2014 4:38:00 AM	R19202
Isopropylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
4-Isopropyltoluene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
4-Methyl-2-pentanone	ND	10		µg/L	1	6/12/2014 4:38:00 AM	R19202
Methylene Chloride	ND	3.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
n-Butylbenzene	ND	3.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
n-Propylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
sec-Butylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Styrene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
tert-Butylbenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
trans-1,2-DCE	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Trichlorofluoromethane	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Vinyl chloride	ND	1.0		µg/L	1	6/12/2014 4:38:00 AM	R19202
Xylenes, Total	ND	1.5		µg/L	1	6/12/2014 4:38:00 AM	R19202
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	6/12/2014 4:38:00 AM	R19202
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	1	6/12/2014 4:38:00 AM	R19202
Surr: Dibromofluoromethane	111	70-130		%REC	1	6/12/2014 4:38:00 AM	R19202
Surr: Toluene-d8	102	70-130		%REC	1	6/12/2014 4:38:00 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-#2-6/5/14
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 6:45:00 PM
Lab ID: 1406364-013
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Toluene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Ethylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Naphthalene	ND	2.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1-Methylnaphthalene	ND	4.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
2-Methylnaphthalene	ND	4.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Acetone	ND	10		µg/L	1	6/12/2014 5:06:45 AM	R19202
Bromobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Bromodichloromethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Bromoform	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Bromomethane	ND	3.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
2-Butanone	ND	10		µg/L	1	6/12/2014 5:06:45 AM	R19202
Carbon disulfide	ND	10		µg/L	1	6/12/2014 5:06:45 AM	R19202
Carbon Tetrachloride	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Chlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Chloroethane	ND	2.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Chloroform	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Chloromethane	ND	3.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
2-Chlorotoluene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
4-Chlorotoluene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
cis-1,2-DCE	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Dibromochloromethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Dibromomethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,1-Dichloroethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,1-Dichloroethene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2-Dichloropropane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,3-Dichloropropane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
2,2-Dichloropropane	ND	2.0		µg/L	1	6/12/2014 5:06:45 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-#2-6/5/14
Project: 2014 2nd Quarter
Collection Date: 6/5/2014 6:45:00 PM
Lab ID: 1406364-013
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Hexachlorobutadiene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
2-Hexanone	ND	10		µg/L	1	6/12/2014 5:06:45 AM	R19202
Isopropylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
4-Isopropyltoluene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
4-Methyl-2-pentanone	ND	10		µg/L	1	6/12/2014 5:06:45 AM	R19202
Methylene Chloride	ND	3.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
n-Butylbenzene	ND	3.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
n-Propylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
sec-Butylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Styrene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
tert-Butylbenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
trans-1,2-DCE	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Trichlorofluoromethane	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Vinyl chloride	ND	1.0		µg/L	1	6/12/2014 5:06:45 AM	R19202
Xylenes, Total	ND	1.5		µg/L	1	6/12/2014 5:06:45 AM	R19202
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	6/12/2014 5:06:45 AM	R19202
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	1	6/12/2014 5:06:45 AM	R19202
Surr: Dibromofluoromethane	116	70-130		%REC	1	6/12/2014 5:06:45 AM	R19202
Surr: Toluene-d8	99.5	70-130		%REC	1	6/12/2014 5:06:45 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-6/4/14
Project: 2014 2nd Quarter
Collection Date: 6/4/2014
Lab ID: 1406364-014
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Acenaphthylene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Aniline	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Anthracene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Azobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Benz(a)anthracene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Benzo(a)pyrene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Benzo(b)fluoranthene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Benzo(k)fluoranthene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Benzoic acid	ND	20		µg/L	1	6/11/2014 12:06:10 AM	13597
Benzyl alcohol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Butyl benzyl phthalate	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Carbazole	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4-Chloroaniline	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2-Chloronaphthalene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2-Chlorophenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Chrysene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Di-n-butyl phthalate	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Di-n-octyl phthalate	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Dibenzofuran	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
1,2-Dichlorobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
1,3-Dichlorobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
1,4-Dichlorobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Diethyl phthalate	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Dimethyl phthalate	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2,4-Dichlorophenol	ND	20		µg/L	1	6/11/2014 12:06:10 AM	13597
2,4-Dimethylphenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/11/2014 12:06:10 AM	13597
2,4-Dinitrophenol	ND	20		µg/L	1	6/11/2014 12:06:10 AM	13597

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-6/4/14
Project: 2014 2nd Quarter
Collection Date: 6/4/2014
Lab ID: 1406364-014
Matrix: AQUEOUS
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2,6-Dinitrotoluene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Fluoranthene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Fluorene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Hexachlorobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Hexachlorobutadiene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Hexachloroethane	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Isophorone	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
1-Methylnaphthalene	88	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2-Methylnaphthalene	110	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2-Methylphenol	ND	20		µg/L	1	6/11/2014 12:06:10 AM	13597
3+4-Methylphenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
N-Nitrosodimethylamine	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Naphthalene	200	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2-Nitroaniline	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
3-Nitroaniline	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4-Nitroaniline	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Nitrobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2-Nitrophenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
4-Nitrophenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Pentachlorophenol	ND	20		µg/L	1	6/11/2014 12:06:10 AM	13597
Phenanthrene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Phenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Pyrene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Pyridine	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/11/2014 12:06:10 AM	13597
Surr: 2-Fluorophenol	41.7	12.1-85.8		%REC	1	6/11/2014 12:06:10 AM	13597
Surr: Phenol-d5	39.0	17.7-65.8		%REC	1	6/11/2014 12:06:10 AM	13597
Surr: 2,4,6-Tribromophenol	67.2	26-138		%REC	1	6/11/2014 12:06:10 AM	13597
Surr: Nitrobenzene-d5	71.9	47.5-119		%REC	1	6/11/2014 12:06:10 AM	13597
Surr: 2-Fluorobiphenyl	69.2	48.1-106		%REC	1	6/11/2014 12:06:10 AM	13597
Surr: 4-Terphenyl-d14	64.3	44-113		%REC	1	6/11/2014 12:06:10 AM	13597

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2014 2nd Quarter
Collection Date:
Lab ID: 1406364-015
Matrix: TRIP BLANK
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Toluene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Ethylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Naphthalene	ND	2.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1-Methylnaphthalene	ND	4.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
2-Methylnaphthalene	ND	4.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Acetone	ND	10		µg/L	1	6/12/2014 5:35:37 AM	R19202
Bromobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Bromodichloromethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Bromoform	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Bromomethane	ND	3.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
2-Butanone	ND	10		µg/L	1	6/12/2014 5:35:37 AM	R19202
Carbon disulfide	ND	10		µg/L	1	6/12/2014 5:35:37 AM	R19202
Carbon Tetrachloride	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Chlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Chloroethane	ND	2.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Chloroform	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Chloromethane	ND	3.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
2-Chlorotoluene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
4-Chlorotoluene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
cis-1,2-DCE	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Dibromochloromethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Dibromomethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,1-Dichloroethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,1-Dichloroethene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2-Dichloropropane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,3-Dichloropropane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
2,2-Dichloropropane	ND	2.0		µg/L	1	6/12/2014 5:35:37 AM	R19202

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2014 2nd Quarter
Collection Date:
Lab ID: 1406364-015
Matrix: TRIP BLANK
Received Date: 6/6/2014 3:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Hexachlorobutadiene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
2-Hexanone	ND	10		µg/L	1	6/12/2014 5:35:37 AM	R19202
Isopropylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
4-Isopropyltoluene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
4-Methyl-2-pentanone	ND	10		µg/L	1	6/12/2014 5:35:37 AM	R19202
Methylene Chloride	ND	3.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
n-Butylbenzene	ND	3.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
n-Propylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
sec-Butylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Styrene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
tert-Butylbenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
trans-1,2-DCE	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Trichlorofluoromethane	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Vinyl chloride	ND	1.0		µg/L	1	6/12/2014 5:35:37 AM	R19202
Xylenes, Total	ND	1.5		µg/L	1	6/12/2014 5:35:37 AM	R19202
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	6/12/2014 5:35:37 AM	R19202
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/12/2014 5:35:37 AM	R19202
Surr: Dibromofluoromethane	115	70-130		%REC	1	6/12/2014 5:35:37 AM	R19202
Surr: Toluene-d8	102	70-130		%REC	1	6/12/2014 5:35:37 AM	R19202
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **cadg**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/12/2014 5:35:37 AM	R19202
Surr: BFB	96.9	70-130		%REC	1	6/12/2014 5:35:37 AM	R19202

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

Qualifiers:

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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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19227** RunNo: **19227**
Prep Date: Analysis Date: **6/12/2014** SeqNo: **555952** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19227** RunNo: **19227**
Prep Date: Analysis Date: **6/12/2014** SeqNo: **555953** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	100	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.8	85	115			
Chromium	0.49	0.0060	0.5000	0	98.3	85	115			
Copper	0.49	0.0060	0.5000	0	98.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.50	0.0020	0.5000	0	101	85	115			
Silver	0.099	0.0050	0.1000	0	98.8	85	115			
Zinc	0.52	0.010	0.5000	0	105	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19281** RunNo: **19281**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557419** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19281** RunNo: **19281**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557420** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.1	85	115			
Iron	0.50	0.020	0.5000	0	99.8	85	115			
Manganese	0.48	0.0020	0.5000	0	96.9	85	115			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **1406364-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558727** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.77	0.0020	0.5000	0.1962	115	70	130			
Cadmium	0.52	0.0020	0.5000	0	104	70	130			
Chromium	0.49	0.0060	0.5000	0.004070	96.2	70	130			
Copper	0.51	0.0060	0.5000	0.004700	101	70	130			
Magnesium	68	1.0	50.00	17.39	101	70	130			
Potassium	65	1.0	50.00	9.193	111	70	130			

Sample ID **1406364-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558728** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.78	0.0020	0.5000	0.1962	118	70	130	1.36	20	
Cadmium	0.49	0.0020	0.5000	0	98.1	70	130	5.58	20	
Chromium	0.49	0.0060	0.5000	0.004070	97.3	70	130	1.11	20	
Copper	0.52	0.0060	0.5000	0.004700	102	70	130	1.10	20	
Magnesium	67	1.0	50.00	17.39	99.5	70	130	0.806	20	
Potassium	64	1.0	50.00	9.193	110	70	130	1.16	20	

Sample ID **MB-13717** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558754** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS-13717** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **LCS-13717** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558755** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.6	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.4	85	115			
Calcium	51	1.0	50.00	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Magnesium	51	1.0	50.00	0	101	85	115			
Manganese	0.51	0.0020	0.5000	0	101	85	115			
Silver	0.098	0.0050	0.1000	0	98.0	85	115			
Sodium	50	1.0	50.00	0	99.8	85	115			
Zinc	0.51	0.010	0.5000	0	103	85	115			

Sample ID **MB-13717** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558756** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	1.0								

Sample ID **LCS-13717** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **13717** RunNo: **19331**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **558757** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	50	1.0	50.00	0	99.7	85	115			

Sample ID **1406364-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19357**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **559774** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.48	0.010	0.5000	0.01675	92.1	70	130			

Sample ID **1406364-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19357**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **559775** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.48	0.010	0.5000	0.01675	91.7	70	130	0.325	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **1406364-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19357**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **559777** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	150	5.0	50.00	105.3	94.2	70	130			
Manganese	1.2	0.010	0.5000	0.7036	98.4	70	130			

Sample ID **1406364-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19357**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **559778** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	150	5.0	50.00	105.3	85.8	70	130	2.81	20	
Manganese	1.2	0.010	0.5000	0.7036	96.2	70	130	0.895	20	

Sample ID **MB-13717** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **13717** RunNo: **19357**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **559813** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.021	0.020								

Sample ID **LCS-13717** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **13717** RunNo: **19357**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **559814** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.53	0.020	0.5000	0	107	85	115			B

Sample ID **1406364-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19365**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **560153** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.11	0.0050	0.1000	0	106	70	130			

Sample ID **1406364-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-2** Batch ID: **13717** RunNo: **19365**
Prep Date: **6/16/2014** Analysis Date: **6/18/2014** SeqNo: **560154** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.11	0.0050	0.1000	0	106	70	130	0.199	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19364** RunNo: **19364**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560092** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.5	85	115			
Lead	0.024	0.0010	0.02500	0	94.8	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19364** RunNo: **19364**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560093** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.022	0.0010	0.02500	0	89.7	85	115			
Lead	0.023	0.0010	0.02500	0	93.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19364** RunNo: **19364**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560094** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19364** RunNo: **19364**
Prep Date: Analysis Date: **6/18/2014** SeqNo: **560095** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Sample ID **LCS RR** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19449** RunNo: **19449**
Prep Date: Analysis Date: **6/20/2014** SeqNo: **562633** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.024	0.0010	0.02500	0	95.9	85	115			

Sample ID **LCS RR** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19449** RunNo: **19449**
Prep Date: Analysis Date: **6/20/2014** SeqNo: **562635** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.023	0.0010	0.02500	0	93.4	85	115			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB RR** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19449** RunNo: **19449**
Prep Date: Analysis Date: **6/20/2014** SeqNo: **562637** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								

Sample ID **MB RR** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19449** RunNo: **19449**
Prep Date: Analysis Date: **6/20/2014** SeqNo: **562639** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19508** RunNo: **19508**
Prep Date: Analysis Date: **6/25/2014** SeqNo: **564692** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.024	0.0010	0.02500	0	96.3	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R19508** RunNo: **19508**
Prep Date: Analysis Date: **6/25/2014** SeqNo: **564693** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.024	0.0010	0.02500	0	95.8	85	115			
Uranium	0.025	0.0010	0.02500	0	99.1	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19508** RunNo: **19508**
Prep Date: Analysis Date: **6/25/2014** SeqNo: **564694** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R19508** RunNo: **19508**
Prep Date: Analysis Date: **6/25/2014** SeqNo: **564695** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **1406364-010FMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **MKTF-18** Batch ID: **13717** RunNo: **19343**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **559194** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.047	0.0050	0.02500	0.02238	99.8	70	130	1.17	20	

Sample ID **1406364-010FMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **MKTF-18** Batch ID: **13717** RunNo: **19343**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **559195** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.048	0.0050	0.02500	0.02238	102	70	130			

Sample ID **LLLCS-13717** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **13717** RunNo: **19343**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **559197** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	98.4	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.023	0.0010	0.02500	0	93.0	85	115			

Sample ID **MB-13717** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **13717** RunNo: **19343**
Prep Date: **6/16/2014** Analysis Date: **6/17/2014** SeqNo: **559199** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **1406364-010FMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **MKTF-18** Batch ID: **13717** RunNo: **19535**
Prep Date: **6/16/2014** Analysis Date: **6/26/2014** SeqNo: **565861** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.028	0.0050	0.02500	0.01348	57.3	70	130	4.06	20	S
Selenium	0.020	0.0050	0.02500	0.01258	27.9	70	130	3.61	20	S

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **1406364-010FMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **MKTF-18** Batch ID: **13717** RunNo: **19535**
Prep Date: **6/16/2014** Analysis Date: **6/26/2014** SeqNo: **565862** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.029	0.0050	0.02500	0.01348	61.9	70	130			S
Selenium	0.020	0.0050	0.02500	0.01258	30.8	70	130			S

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID	**MB-13740**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**13740**	RunNo:	**19350**
Prep Date:	**6/17/2014**	Analysis Date:	**6/18/2014**	SeqNo:	**559471** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-13740**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**13740**	RunNo:	**19350**
Prep Date:	**6/17/2014**	Analysis Date:	**6/18/2014**	SeqNo:	**559472** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	97.8	80	120			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19161** RunNo: **19161**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553729** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19161** RunNo: **19161**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553730** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	97.0	90	110			
Chloride	4.7	0.50	5.000	0	95.0	90	110			
Bromide	2.5	0.10	2.500	0	98.1	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	93.9	90	110			
Sulfate	9.7	0.50	10.00	0	97.3	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	98.4	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19161** RunNo: **19161**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553777** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19161** RunNo: **19161**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553778** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.9	90	110			
Chloride	4.6	0.50	5.000	0	92.0	90	110			
Bromide	2.4	0.10	2.500	0	95.5	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.1	90	110			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19161** RunNo: **19161**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553778** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.4	0.50	10.00	0	93.8	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.5	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19165** RunNo: **19165**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553915** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19165** RunNo: **19165**
Prep Date: Analysis Date: **6/9/2014** SeqNo: **553916** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.7	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R19191** RunNo: **19191**
Prep Date: Analysis Date: **6/10/2014** SeqNo: **554760** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R19191** RunNo: **19191**
Prep Date: Analysis Date: **6/10/2014** SeqNo: **554761** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	91.7	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	94.9	90	110			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **MB-13583** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **13583** RunNo: **19152**
Prep Date: **6/9/2014** Analysis Date: **6/11/2014** SeqNo: **554465** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		103	62.7	145			

Sample ID **LCS-13583** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **13583** RunNo: **19152**
Prep Date: **6/9/2014** Analysis Date: **6/11/2014** SeqNo: **554466** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.9	1.0	5.000	0	97.4	78.6	146			
Surr: DNOP	0.46		0.5000		91.3	62.7	145			

Sample ID **LCSD-13583** SampType: **LCSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02** Batch ID: **13583** RunNo: **19152**
Prep Date: **6/9/2014** Analysis Date: **6/11/2014** SeqNo: **554468** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.4	1.0	5.000	0	89.0	78.6	146	9.06	26.5	
Surr: DNOP	0.44		0.5000		88.0	62.7	145	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R19202**	RunNo: **19202**	
Prep Date:	Analysis Date: **6/11/2014**	SeqNo: **555226**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555226** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555257** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	21	1.0	20.00	0	104	80	120			
Chlorobenzene	19	1.0	20.00	0	92.5	70	130			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555257** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	111	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	93.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.9	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **1406364-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-1** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555274** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9400	50	1000	8261	111	70	130			E
Toluene	7000	50	1000	5991	105	67.5	123			E
Chlorobenzene	950	50	1000	0	95.3	70	130			
1,1-Dichloroethene	1200	50	1000	35.12	114	81.9	134			
Trichloroethene (TCE)	940	50	1000	0	93.6	70	130			
Surr: 1,2-Dichloroethane-d4	500		500.0		99.9	70	130			
Surr: 4-Bromofluorobenzene	460		500.0		92.7	70	130			
Surr: Dibromofluoromethane	480		500.0		96.3	70	130			
Surr: Toluene-d8	480		500.0		96.9	70	130			

Sample ID **1406364-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-1** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555275** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8700	50	1000	8261	48.0	70	130	6.98	20	ES
Toluene	7000	50	1000	5991	98.1	67.5	123	1.03	20	E
Chlorobenzene	960	50	1000	0	95.7	70	130	0.506	20	
1,1-Dichloroethene	1100	50	1000	35.12	102	81.9	134	10.4	20	
Trichloroethene (TCE)	880	50	1000	0	87.5	70	130	6.74	20	
Surr: 1,2-Dichloroethane-d4	490		500.0		98.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	470		500.0		93.2	70	130	0	0	
Surr: Dibromofluoromethane	470		500.0		95.0	70	130	0	0	
Surr: Toluene-d8	500		500.0		101	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R19253**	RunNo: **19253**	
Prep Date:	Analysis Date: **6/13/2014**	SeqNo: **557108**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R19253** RunNo: **19253**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557108** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs 200ng an** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R19253** RunNo: **19253**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557110** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.0	70	130			
Toluene	20	1.0	20.00	0	99.0	80	120			
Chlorobenzene	18	1.0	20.00	0	90.2	70	130			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **100ng lcs 200ng an** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R19253** RunNo: **19253**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557110** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	99.4	82.6	131			
Trichloroethene (TCE)	17	1.0	20.00	0	85.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.3	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **mb-13597**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **13597**	RunNo: **19174**			
Prep Date: **6/10/2014**	Analysis Date: **6/10/2014**	SeqNo: **554254**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **mb-13597**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **13597**	RunNo: **19174**			
Prep Date: **6/10/2014**	Analysis Date: **6/10/2014**	SeqNo: **554254**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		62.8	12.1	85.8			
Surr: Phenol-d5	110		200.0		54.1	17.7	65.8			
Surr: 2,4,6-Tribromophenol	180		200.0		88.5	26	138			
Surr: Nitrobenzene-d5	98		100.0		98.1	47.5	119			
Surr: 2-Fluorobiphenyl	97		100.0		96.7	48.1	106			
Surr: 4-Terphenyl-d14	96		100.0		96.2	44	113			

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **lcs-13597** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **13597** RunNo: **19174**
Prep Date: **6/10/2014** Analysis Date: **6/10/2014** SeqNo: **554255** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	74	10	100.0	0	74.1	50.3	109			
4-Chloro-3-methylphenol	140	10	200.0	0	67.6	51.2	113			
2-Chlorophenol	120	10	200.0	0	57.6	48.5	104			
1,4-Dichlorobenzene	69	10	100.0	0	68.8	39.5	106			
2,4-Dinitrotoluene	69	10	100.0	0	68.7	45.4	107			
N-Nitrosodi-n-propylamine	77	10	100.0	0	77.1	50.4	119			
4-Nitrophenol	70	10	200.0	0	35.1	15.5	62.2			
Pentachlorophenol	71	20	200.0	0	35.5	23.5	93.5			
Phenol	97	10	200.0	0	48.7	26.8	65.6			
Pyrene	81	10	100.0	0	81.4	54.4	108			
1,2,4-Trichlorobenzene	67	10	100.0	0	66.7	39.9	106			
Surr: 2-Fluorophenol	88		200.0		43.8	12.1	85.8			
Surr: Phenol-d5	110		200.0		53.2	17.7	65.8			
Surr: 2,4,6-Tribromophenol	93		200.0		46.5	26	138			
Surr: Nitrobenzene-d5	75		100.0		74.8	47.5	119			
Surr: 2-Fluorobiphenyl	72		100.0		72.0	48.1	106			
Surr: 4-Terphenyl-d14	75		100.0		75.4	44	113			

Sample ID **lcsd-13597** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **13597** RunNo: **19174**
Prep Date: **6/10/2014** Analysis Date: **6/10/2014** SeqNo: **554256** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	67	10	100.0	0	66.7	50.3	109	10.4	27.2	
4-Chloro-3-methylphenol	140	10	200.0	0	68.5	51.2	113	1.34	25.9	
2-Chlorophenol	100	10	200.0	0	51.9	48.5	104	10.5	22.5	
1,4-Dichlorobenzene	60	10	100.0	0	60.2	39.5	106	13.3	24.6	
2,4-Dinitrotoluene	65	10	100.0	0	65.2	45.4	107	5.17	25.3	
N-Nitrosodi-n-propylamine	65	10	100.0	0	64.6	50.4	119	17.6	23.6	
4-Nitrophenol	73	10	200.0	0	36.3	15.5	62.2	3.33	34.7	
Pentachlorophenol	66	20	200.0	0	33.1	23.5	93.5	7.12	32.8	
Phenol	93	10	200.0	0	46.3	26.8	65.6	5.03	25.5	
Pyrene	91	10	100.0	0	91.4	54.4	108	11.6	31.4	
1,2,4-Trichlorobenzene	58	10	100.0	0	58.0	39.9	106	13.9	25.9	
Surr: 2-Fluorophenol	84		200.0		41.9	12.1	85.8	0	0	
Surr: Phenol-d5	99		200.0		49.7	17.7	65.8	0	0	
Surr: 2,4,6-Tribromophenol	82		200.0		40.8	26	138	0	0	
Surr: Nitrobenzene-d5	66		100.0		65.8	47.5	119	0	0	
Surr: 2-Fluorobiphenyl	64		100.0		63.7	48.1	106	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID	**lcsd-13597**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**13597**	RunNo:	**19174**
Prep Date:	**6/10/2014**	Analysis Date:	**6/10/2014**	SeqNo:	**554256** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	74		100.0		73.9	44	113	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.
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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555295** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.3		10.00		93.5	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555297** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	102	80	120			
Surr: BFB	9.9		10.00		98.9	70	130			

Sample ID **1406364-002B MS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-2** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555306** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.9	0.050	0.5000	1.488	87.4	70	130			
Surr: BFB	9.5		10.00		95.2	70	130			

Sample ID **1406364-002B MSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-2** Batch ID: **R19202** RunNo: **19202**
Prep Date: Analysis Date: **6/11/2014** SeqNo: **555307** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.8	0.050	0.5000	1.488	63.0	70	130	6.54	20	S
Surr: BFB	9.6		10.00		96.1	70	130	0	0	

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R19253** RunNo: **19253**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557149** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		96.3	70	130			

Sample ID **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R19253** RunNo: **19253**
Prep Date: Analysis Date: **6/13/2014** SeqNo: **557153** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1406364**
08-Jul-14

Client: Western Refining Southwest, Gallup
Project: 2014 2nd Quarter

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R19253**	RunNo:	**19253**
Prep Date:		Analysis Date:	**6/13/2014**	SeqNo:	**557153** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	98.1	80	120			
Surr: BFB	9.5		10.00		94.7	70	130			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1406364 RcptNo: 1

Received by/date: MG 06/06/14

Logged By: **Michelle Garcia** 6/6/2014 3:50:00 PM Michelle Garcia

Completed By: **Michelle Garcia** 6/9/2014 9:34:19 AM Michelle Garcia

Reviewed By: 06/09/14

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° 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 ☐ 06/09/14

SEE REMARKS

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 26
(<2 or >12 unless noted)
Adjusted? YES
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: FOR METALS ANALYSIS: ADDED 1mL HNO_3 TO -005F, -008F, & -010F FOR ACCEPTABLE pH. FOR DISS. METALS ANALYSIS: ADDED 0.4mL HNO_3 TO -005G, FOR ACCEPTABLE pH. HELD IN LOGIN FOR 24 HOURS AFTER PRESERVATION. 06/09/14 @1150

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 Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2014 2nd Quarter

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: PL, BS

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1406364	8260+MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions										Air Bubbles (Y or N)	
6/6/14	1135	H20	MKTF-1			-001	X	X	X	X	X	X											
6/6/14	1130	H20	MKTF-2			-002	X	X	X	X	X	X											
		H20	~~MKTF-3~~				X	X	X	X	X	X											BS
6/9/14	1610	H20	MKTF-4			-003	X	X	X	X	X	X											
		H20	~~MKTF-5~~				X	X	X	X	X	X											BS
~~6/6/14~~		H20	~~MKTF-6~~				X	X	X	X	X	X											BS
		H20	~~MKTF-7~~				X	X	X	X	X	X											BS
		H20	~~MKTF-8~~				X	X	X	X	X	X											BS
6/5/14	1730	H20	MKTF-9			-004	X	X	X	X	X	X											
d6/14 2745 6/5/14	~~1430~~	H20	MKTF-10 *			-005	X	X	X	X	X	X											
* 6/6/14 6/5/14	1515	H20	MKTF-11			-006	X	X	X	X	X	X											
		H20	~~MKTF-12~~				X	X	X	X	X	X											BS

Date:	Time:	Relinquished by:	Received by:	Date Time
6/6/14	1550	Pam Landers	[illegible]	06/06/14 1550
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

Page 1 of 2

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.

* - Did not collect full bottle set

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ **Rush**_____

Project Name:

2014 2nd Quarter

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1406364	8260+MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions										Air Bubbles (Y or N)
												A 06/09/14										
~~—~~		H20	~~MKTF-13~~				X	X	X	X	X	X										155
~~—~~		H20	~~MKTF-14~~				X	X	X	X	X	X										155
6/5/14	1500	H20	MKTF-15			-007	X	X	X	X	X	X										
6/5/14	1635	H20	MKTF-16			-008	X	X	~~X~~ no	X	X	X										
6/6/14	1015	H20	MKTF-17 ✱			-009	X	X	~~X~~ no	~~X~~ no	~~X~~ no	~~X~~ no										
6/6/14	920	H20	MKTF-18 ✱			-010	X	X	X	X	X	X										
6/4/14	1700	H20	FB-GROUP4-060414			-011	~~X~~ no	~~X~~ no	~~X~~ no	~~X~~ no	~~X~~ no	~~X~~ no										
6/5/14	1830	H20	EB-#1-6/5/14			-012	X	~~X~~ no														
6/5/14	1845	H20	EB-#2-6/5/14			-013	X	~~X~~ no														
6/4/14	—	H20	BD-MKTF-6/4/14			-014			X													
			TB A 06/09/14			-015	X	X														

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/6/14	1550	Pam Landers	Michelle Gonzales	06/06/14	1550
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Page 2 of 2

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.

✱ - Did not collect full bottle set

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

October 03, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 3rd QUARTER-RESAMPLE OrderNo.: 1409D07

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/25/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1409D07**
Date Reported: **10/3/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: 2014 3rd QUARTER-RESAMPLE
Collection Date: 9/24/2014 8:15:00 AM
Lab ID: 1409D07-001
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Acenaphthylene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Aniline	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Anthracene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Azobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Benzoic acid	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566
Benzyl alcohol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Carbazole	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4-Chloroaniline	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2-Chlorophenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Chrysene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Dibenzofuran	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
1,4-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Diethyl phthalate	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: 2014 3rd QUARTER-RESAMPLE
Collection Date: 9/24/2014 8:15:00 AM
Lab ID: 1409D07-001
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Fluoranthene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Fluorene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Hexachloroethane	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Isophorone	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
1-Methylnaphthalene	130	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2-Methylnaphthalene	160	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2-Methylphenol	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Naphthalene	190	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2-Nitroaniline	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
3-Nitroaniline	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4-Nitroaniline	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Nitrobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2-Nitrophenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
4-Nitrophenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Pentachlorophenol	ND	20		µg/L	1	9/30/2014 1:42:49 AM	15566
Phenanthrene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Phenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Pyrene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Pyridine	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/30/2014 1:42:49 AM	15566
Surr: 2-Fluorophenol	68.8	12.1-85.8		%REC	1	9/30/2014 1:42:49 AM	15566
Surr: Phenol-d5	65.6	17.7-65.8		%REC	1	9/30/2014 1:42:49 AM	15566
Surr: 2,4,6-Tribromophenol	97.0	26-138		%REC	1	9/30/2014 1:42:49 AM	15566
Surr: Nitrobenzene-d5	86.1	47.5-119		%REC	1	9/30/2014 1:42:49 AM	15566
Surr: 2-Fluorobiphenyl	85.3	48.1-106		%REC	1	9/30/2014 1:42:49 AM	15566
Surr: 4-Terphenyl-d14	90.1	44-113		%REC	1	9/30/2014 1:42:49 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2014 3rd QUARTER-RESAMPLE
Collection Date: 9/24/2014 8:45:00 AM
Lab ID: 1409D07-002
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Acenaphthylene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Aniline	27	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Anthracene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Azobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Benzoic acid	ND	20		µg/L	1	9/30/2014 2:10:16 AM	15566
Benzyl alcohol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Carbazole	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4-Chloroaniline	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2-Chlorophenol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Chrysene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/30/2014 2:10:16 AM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Dibenzofuran	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
1,4-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Diethyl phthalate	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/30/2014 2:10:16 AM	15566
2,4-Dimethylphenol	190	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/30/2014 2:10:16 AM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/30/2014 2:10:16 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2014 3rd QUARTER-RESAMPLE
Collection Date: 9/24/2014 8:45:00 AM
Lab ID: 1409D07-002
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Fluoranthene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Fluorene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Hexachloroethane	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Isophorone	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
1-Methylnaphthalene	24	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2-Methylnaphthalene	22	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2-Methylphenol	350	40		µg/L	2	9/30/2014 2:08:45 PM	15566
3+4-Methylphenol	240	20		µg/L	2	9/30/2014 2:08:45 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Naphthalene	67	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2-Nitroaniline	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
3-Nitroaniline	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4-Nitroaniline	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Nitrobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2-Nitrophenol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
4-Nitrophenol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Pentachlorophenol	ND	20		µg/L	1	9/30/2014 2:10:16 AM	15566
Phenanthrene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Phenol	78	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Pyrene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Pyridine	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/30/2014 2:10:16 AM	15566
Surr: 2-Fluorophenol	50.9	12.1-85.8		%REC	1	9/30/2014 2:10:16 AM	15566
Surr: Phenol-d5	66.7	17.7-65.8	S	%REC	1	9/30/2014 2:10:16 AM	15566
Surr: 2,4,6-Tribromophenol	87.3	26-138		%REC	1	9/30/2014 2:10:16 AM	15566
Surr: Nitrobenzene-d5	97.4	47.5-119		%REC	1	9/30/2014 2:10:16 AM	15566
Surr: 2-Fluorobiphenyl	88.6	48.1-106		%REC	1	9/30/2014 2:10:16 AM	15566
Surr: 4-Terphenyl-d14	92.8	44-113		%REC	1	9/30/2014 2:10:16 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF RE-SAMPLE
Project: 2014 3rd QUARTER-RESAMPLE
Collection Date: 9/24/2014 8:00:00 AM
Lab ID: 1409D07-003
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Acenaphthylene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Aniline	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Anthracene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Azobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Benzoic acid	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566
Benzyl alcohol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Carbazole	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4-Chloroaniline	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2-Chlorophenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Chrysene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Dibenzofuran	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
1,4-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Diethyl phthalate	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF RE-SAMPLE
Project: 2014 3rd QUARTER-RESAMPLE
Collection Date: 9/24/2014 8:00:00 AM
Lab ID: 1409D07-003
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Fluoranthene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Fluorene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Hexachloroethane	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Isophorone	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
1-Methylnaphthalene	120	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2-Methylnaphthalene	150	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2-Methylphenol	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Naphthalene	170	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2-Nitroaniline	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
3-Nitroaniline	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4-Nitroaniline	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Nitrobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2-Nitrophenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
4-Nitrophenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Pentachlorophenol	ND	20		µg/L	1	9/30/2014 2:37:43 AM	15566
Phenanthrene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Phenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Pyrene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Pyridine	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/30/2014 2:37:43 AM	15566
Surr: 2-Fluorophenol	62.0	12.1-85.8		%REC	1	9/30/2014 2:37:43 AM	15566
Surr: Phenol-d5	60.1	17.7-65.8		%REC	1	9/30/2014 2:37:43 AM	15566
Surr: 2,4,6-Tribromophenol	95.7	26-138		%REC	1	9/30/2014 2:37:43 AM	15566
Surr: Nitrobenzene-d5	80.1	47.5-119		%REC	1	9/30/2014 2:37:43 AM	15566
Surr: 2-Fluorobiphenyl	79.7	48.1-106		%REC	1	9/30/2014 2:37:43 AM	15566
Surr: 4-Terphenyl-d14	86.4	44-113		%REC	1	9/30/2014 2:37:43 AM	15566

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D07**
03-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER-RESAMPLE

Sample ID **mb-15566**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **15566**	RunNo: **21529**			
Prep Date: **9/29/2014**	Analysis Date: **9/29/2014**	SeqNo: **630020**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1409D07**
03-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER-RESAMPLE

Sample ID **mb-15566**	SampType: **MBLK**		TestCode: **EPA Method 8270C: Semivolatiles**		
Client ID: **PBW**	Batch ID: **15566**		RunNo: **21529**		
Prep Date: **9/29/2014**	Analysis Date: **9/29/2014**		SeqNo: **630020**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.1	12.1	85.8			
Surr: Phenol-d5	110		200.0		57.0	17.7	65.8			
Surr: 2,4,6-Tribromophenol	170		200.0		83.4	26	138			
Surr: Nitrobenzene-d5	76		100.0		76.4	47.5	119			
Surr: 2-Fluorobiphenyl	72		100.0		72.5	48.1	106			
Surr: 4-Terphenyl-d14	86		100.0		85.8	44	113			

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#: **1409D07**
03-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER-RESAMPLE

Sample ID **lcs-15566** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **15566** RunNo: **21529**
Prep Date: **9/29/2014** Analysis Date: **9/29/2014** SeqNo: **630021** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	80.2	47.9	114			
4-Chloro-3-methylphenol	170	10	200.0	0	86.9	51.7	122			
2-Chlorophenol	160	10	200.0	0	79.9	40.7	113			
1,4-Dichlorobenzene	68	10	100.0	0	67.6	39.6	99.9			
2,4-Dinitrotoluene	82	10	100.0	0	81.6	40.8	113			
N-Nitrosodi-n-propylamine	76	10	100.0	0	75.7	51.2	111			
4-Nitrophenol	140	10	200.0	0	69.3	15.7	86.9			
Pentachlorophenol	140	20	200.0	0	69.9	21.6	104			
Phenol	130	10	200.0	0	65.2	28.6	71.7			
Pyrene	89	10	100.0	0	89.4	54.2	128			
1,2,4-Trichlorobenzene	75	10	100.0	0	75.3	40.9	101			
Surr: 2-Fluorophenol	120		200.0		61.2	12.1	85.8			
Surr: Phenol-d5	110		200.0		55.4	17.7	65.8			
Surr: 2,4,6-Tribromophenol	170		200.0		86.0	26	138			
Surr: Nitrobenzene-d5	81		100.0		80.6	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.9	48.1	106			
Surr: 4-Terphenyl-d14	92		100.0		92.1	44	113			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1409D07 RcptNo: 1

Received by/date: MG 09/25/14

Logged By: **Lindsay Mangin** 9/25/2014 4:00:00 PM

Completed By: **Lindsay Mangin** 9/26/2014 7:37:40 AM

Reviewed By: mg 09/26/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2014 3rd QUARTER - RESAMPLE

MKTF-04 / MKTF-11 / BLIND DUPLICATE

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409D07	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions										Air Bubbles (Y or N)
9/24/2014	0815	H20	MKTF-04	MISC	MISC	-001			X													
9/24/2014	0845	H20	MKTF-11	MISC	MISC	-002			X													
				1-L AMBER	NONE																	
9/24/2014	0800	H20	BD - MKTF RE-SAMPLE			-003			X													
	09/26/14																					

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/25/2014	1030			9/25/14	1030
9/25/14	1600			09/25/14	1600

Remarks: 8270 RE-SAMPLED. Original samples exceeded holding time.

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.

HALL
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LABORATORY

Hall Environmental Analysis Laboratory
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TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 08, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 3rd QUARTER MKTF WELLS OrderNo.: 1409D04

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 11 sample(s) on 9/25/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-001 **Matrix:** AQUEOUS

Client Sample ID: MKTF-28
Collection Date: 9/24/2014 9:20:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/26/2014 11:31:25 PM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/26/2014 11:31:25 PM	15542
Surr: DNOP	102	59-141		%REC	1	9/26/2014 11:31:25 PM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2014 3:22:39 PM	R21689
Surr: BFB	96.3	70.9-130		%REC	1	10/6/2014 3:22:39 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014 9:20:00 AM
Lab ID: 1409D04-001
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 6:45:32 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-001 **Matrix:** AQUEOUS

Client Sample ID: MKTF-28
Collection Date: 9/24/2014 9:20:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 6:45:32 PM	15566
Surr: 2-Fluorophenol	77.4	12.1-85.8		%REC	1	9/29/2014 6:45:32 PM	15566
Surr: Phenol-d5	62.4	17.7-65.8		%REC	1	9/29/2014 6:45:32 PM	15566
Surr: 2,4,6-Tribromophenol	97.9	26-138		%REC	1	9/29/2014 6:45:32 PM	15566
Surr: Nitrobenzene-d5	94.2	47.5-119		%REC	1	9/29/2014 6:45:32 PM	15566
Surr: 2-Fluorobiphenyl	96.9	48.1-106		%REC	1	9/29/2014 6:45:32 PM	15566
Surr: 4-Terphenyl-d14	102	44-113		%REC	1	9/29/2014 6:45:32 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Toluene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Methyl tert-butyl ether (MTBE)	16	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Naphthalene	ND	2.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Acetone	ND	10		µg/L	1	10/4/2014 1:36:55 AM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Bromoform	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Bromomethane	ND	3.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
2-Butanone	ND	10		µg/L	1	10/4/2014 1:36:55 AM	R21646
Carbon disulfide	ND	10		µg/L	1	10/4/2014 1:36:55 AM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Chloroethane	ND	2.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Chloroform	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Chloromethane	ND	3.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646

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

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CLIENT: Western Refining Southwest, Gallup
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Lab ID: 1409D04-001 **Matrix:** AQUEOUS

Client Sample ID: MKTF-28
Collection Date: 9/24/2014 9:20:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1-Dichloroethene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
2-Hexanone	ND	10		µg/L	1	10/4/2014 1:36:55 AM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2014 1:36:55 AM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Styrene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/4/2014 1:36:55 AM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/4/2014 1:36:55 AM	R21646
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	1	10/4/2014 1:36:55 AM	R21646
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	10/4/2014 1:36:55 AM	R21646
Surr: Dibromofluoromethane	88.1	70-130		%REC	1	10/4/2014 1:36:55 AM	R21646
Surr: Toluene-d8	90.5	70-130		%REC	1	10/4/2014 1:36:55 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-002 **Matrix:** AQUEOUS

Client Sample ID: MKTF-29
Collection Date: 9/24/2014 9:45:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 1:02:08 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 1:02:08 AM	15542
Surr: DNOP	112	59-141		%REC	1	9/27/2014 1:02:08 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2014 3:52:43 PM	R21689
Surr: BFB	96.6	70.9-130		%REC	1	10/6/2014 3:52:43 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-002 **Matrix:** AQUEOUS

Client Sample ID: MKTF-29
Collection Date: 9/24/2014 9:45:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 7:13:36 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-002 **Matrix:** AQUEOUS

Client Sample ID: MKTF-29
Collection Date: 9/24/2014 9:45:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 7:13:36 PM	15566
Surr: 2-Fluorophenol	86.2	12.1-85.8	S	%REC	1	9/29/2014 7:13:36 PM	15566
Surr: Phenol-d5	70.0	17.7-65.8	S	%REC	1	9/29/2014 7:13:36 PM	15566
Surr: 2,4,6-Tribromophenol	91.2	26-138		%REC	1	9/29/2014 7:13:36 PM	15566
Surr: Nitrobenzene-d5	97.9	47.5-119		%REC	1	9/29/2014 7:13:36 PM	15566
Surr: 2-Fluorobiphenyl	96.7	48.1-106		%REC	1	9/29/2014 7:13:36 PM	15566
Surr: 4-Terphenyl-d14	108	44-113		%REC	1	9/29/2014 7:13:36 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Toluene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Methyl tert-butyl ether (MTBE)	13	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Naphthalene	ND	2.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Acetone	ND	10		µg/L	1	10/4/2014 2:06:27 AM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Bromoform	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Bromomethane	ND	3.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
2-Butanone	ND	10		µg/L	1	10/4/2014 2:06:27 AM	R21646
Carbon disulfide	ND	10		µg/L	1	10/4/2014 2:06:27 AM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Chloroethane	ND	2.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Chloroform	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Chloromethane	ND	3.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-002 **Matrix:** AQUEOUS

Client Sample ID: MKTF-29
Collection Date: 9/24/2014 9:45:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1-Dichloroethene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
2-Hexanone	ND	10		µg/L	1	10/4/2014 2:06:27 AM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2014 2:06:27 AM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Styrene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/4/2014 2:06:27 AM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/4/2014 2:06:27 AM	R21646
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%REC	1	10/4/2014 2:06:27 AM	R21646
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	10/4/2014 2:06:27 AM	R21646
Surr: Dibromofluoromethane	87.4	70-130		%REC	1	10/4/2014 2:06:27 AM	R21646
Surr: Toluene-d8	91.7	70-130		%REC	1	10/4/2014 2:06:27 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-003 **Matrix:** AQUEOUS

Client Sample ID: MKTF-30
Collection Date: 9/24/2014 10:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 1:32:07 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 1:32:07 AM	15542
Surr: DNOP	113	59-141		%REC	1	9/27/2014 1:32:07 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2014 4:22:47 PM	R21689
Surr: BFB	95.5	70.9-130		%REC	1	10/6/2014 4:22:47 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-003 **Matrix:** AQUEOUS

Client Sample ID: MKTF-30
Collection Date: 9/24/2014 10:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 7:41:41 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-003 **Matrix:** AQUEOUS

Client Sample ID: MKTF-30
Collection Date: 9/24/2014 10:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 7:41:41 PM	15566
Surr: 2-Fluorophenol	75.6	12.1-85.8		%REC	1	9/29/2014 7:41:41 PM	15566
Surr: Phenol-d5	64.9	17.7-65.8		%REC	1	9/29/2014 7:41:41 PM	15566
Surr: 2,4,6-Tribromophenol	80.8	26-138		%REC	1	9/29/2014 7:41:41 PM	15566
Surr: Nitrobenzene-d5	95.5	47.5-119		%REC	1	9/29/2014 7:41:41 PM	15566
Surr: 2-Fluorobiphenyl	86.9	48.1-106		%REC	1	9/29/2014 7:41:41 PM	15566
Surr: 4-Terphenyl-d14	98.6	44-113		%REC	1	9/29/2014 7:41:41 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Toluene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Methyl tert-butyl ether (MTBE)	5.9	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2-Dichloroethane (EDC)	4.4	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Naphthalene	ND	2.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Acetone	ND	10		µg/L	1	10/4/2014 2:36:00 AM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Bromoform	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Bromomethane	ND	3.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
2-Butanone	ND	10		µg/L	1	10/4/2014 2:36:00 AM	R21646
Carbon disulfide	ND	10		µg/L	1	10/4/2014 2:36:00 AM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Chloroethane	ND	2.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Chloroform	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Chloromethane	ND	3.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
cis-1,2-DCE	4.2	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-003 **Matrix:** AQUEOUS

Client Sample ID: MKTF-30
Collection Date: 9/24/2014 10:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1-Dichloroethane	68	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1-Dichloroethene	3.5	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
2-Hexanone	ND	10		µg/L	1	10/4/2014 2:36:00 AM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2014 2:36:00 AM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Styrene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1,1-Trichloroethane	2.5	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,1,2-Trichloroethane	1.1	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Trichloroethene (TCE)	4.0	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/4/2014 2:36:00 AM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/4/2014 2:36:00 AM	R21646
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	1	10/4/2014 2:36:00 AM	R21646
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	1	10/4/2014 2:36:00 AM	R21646
Surr: Dibromofluoromethane	82.8	70-130		%REC	1	10/4/2014 2:36:00 AM	R21646
Surr: Toluene-d8	93.4	70-130		%REC	1	10/4/2014 2:36:00 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-004 **Matrix:** AQUEOUS

Client Sample ID: MKTF-27
Collection Date: 9/24/2014 10:25:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 2:02:09 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 2:02:09 AM	15542
Surr: DNOP	115	59-141		%REC	1	9/27/2014 2:02:09 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2014 4:53:02 PM	R21689
Surr: BFB	94.4	70.9-130		%REC	1	10/6/2014 4:53:02 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-004 **Matrix:** AQUEOUS

Client Sample ID: MKTF-27
Collection Date: 9/24/2014 10:25:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 8:09:44 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014 10:25:00 AM
Lab ID: 1409D04-004
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 8:09:44 PM	15566
Surr: 2-Fluorophenol	79.7	12.1-85.8		%REC	1	9/29/2014 8:09:44 PM	15566
Surr: Phenol-d5	66.9	17.7-65.8	S	%REC	1	9/29/2014 8:09:44 PM	15566
Surr: 2,4,6-Tribromophenol	80.8	26-138		%REC	1	9/29/2014 8:09:44 PM	15566
Surr: Nitrobenzene-d5	103	47.5-119		%REC	1	9/29/2014 8:09:44 PM	15566
Surr: 2-Fluorobiphenyl	87.6	48.1-106		%REC	1	9/29/2014 8:09:44 PM	15566
Surr: 4-Terphenyl-d14	99.8	44-113		%REC	1	9/29/2014 8:09:44 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Toluene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Ethylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Methyl tert-butyl ether (MTBE)	11	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2-Dichloroethane (EDC)	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Naphthalene	ND	2.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1-Methylnaphthalene	ND	4.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
2-Methylnaphthalene	ND	4.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Acetone	ND	10	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Bromobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Bromodichloromethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Bromoform	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Bromomethane	ND	3.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
2-Butanone	ND	10	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Carbon disulfide	ND	10	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Carbon Tetrachloride	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Chlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Chloroethane	ND	2.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Chloroform	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Chloromethane	ND	3.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
2-Chlorotoluene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
4-Chlorotoluene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
cis-1,2-DCE	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
cis-1,3-Dichloropropene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Dibromochloromethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Dibromomethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2-Dichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-004 **Matrix:** AQUEOUS

Client Sample ID: MKTF-27
Collection Date: 9/24/2014 10:25:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,3-Dichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,4-Dichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Dichlorodifluoromethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1-Dichloroethane	2.0	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1-Dichloroethene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2-Dichloropropane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,3-Dichloropropane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
2,2-Dichloropropane	ND	2.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1-Dichloropropene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Hexachlorobutadiene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
2-Hexanone	ND	10	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Isopropylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
4-Isopropyltoluene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
4-Methyl-2-pentanone	ND	10	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Methylene Chloride	ND	3.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
n-Butylbenzene	ND	3.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
n-Propylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
sec-Butylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Styrene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
tert-Butylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Tetrachloroethene (PCE)	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
trans-1,2-DCE	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
trans-1,3-Dichloropropene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1,1-Trichloroethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,1,2-Trichloroethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Trichloroethene (TCE)	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Trichlorofluoromethane	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
1,2,3-Trichloropropane	ND	2.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Vinyl chloride	ND	1.0	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Xylenes, Total	ND	1.5	p	µg/L	1	10/4/2014 3:05:33 AM	R21646
Surr: 1,2-Dichloroethane-d4	88.1	70-130	p	%REC	1	10/4/2014 3:05:33 AM	R21646
Surr: 4-Bromofluorobenzene	103	70-130	p	%REC	1	10/4/2014 3:05:33 AM	R21646
Surr: Dibromofluoromethane	84.7	70-130	p	%REC	1	10/4/2014 3:05:33 AM	R21646
Surr: Toluene-d8	92.4	70-130	p	%REC	1	10/4/2014 3:05:33 AM	R21646

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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-005 **Matrix:** AQUEOUS

Client Sample ID: MKTF-26
Collection Date: 9/24/2014 10:50:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 2:32:18 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 2:32:18 AM	15542
Surr: DNOP	116	59-141		%REC	1	9/27/2014 2:32:18 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2.8	0.50	P	mg/L	10	10/6/2014 5:23:17 PM	R21689
Surr: BFB	97.5	70.9-130	P	%REC	10	10/6/2014 5:23:17 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-005 **Matrix:** AQUEOUS

Client Sample ID: MKTF-26
Collection Date: 9/24/2014 10:50:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 8:37:39 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Phenol	13	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-005 **Matrix:** AQUEOUS

Client Sample ID: MKTF-26
Collection Date: 9/24/2014 10:50:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 8:37:39 PM	15566
Surr: 2-Fluorophenol	83.8	12.1-85.8		%REC	1	9/29/2014 8:37:39 PM	15566
Surr: Phenol-d5	74.1	17.7-65.8	S	%REC	1	9/29/2014 8:37:39 PM	15566
Surr: 2,4,6-Tribromophenol	99.8	26-138		%REC	1	9/29/2014 8:37:39 PM	15566
Surr: Nitrobenzene-d5	106	47.5-119		%REC	1	9/29/2014 8:37:39 PM	15566
Surr: 2-Fluorobiphenyl	99.2	48.1-106		%REC	1	9/29/2014 8:37:39 PM	15566
Surr: 4-Terphenyl-d14	105	44-113		%REC	1	9/29/2014 8:37:39 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	1600	50		µg/L	50	10/4/2014 5:09:47 PM	R21669
Toluene	19	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Ethylbenzene	12	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Methyl tert-butyl ether (MTBE)	84	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2-Dichloroethane (EDC)	8.1	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Naphthalene	ND	2.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1-Methylnaphthalene	ND	4.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
2-Methylnaphthalene	ND	4.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Acetone	ND	10	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Bromobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Bromodichloromethane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Bromoform	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Bromomethane	ND	3.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
2-Butanone	ND	10	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Carbon disulfide	ND	10	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Carbon Tetrachloride	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Chlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Chloroethane	ND	2.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Chloroform	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Chloromethane	ND	3.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
2-Chlorotoluene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
4-Chlorotoluene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
cis-1,2-DCE	13	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
cis-1,3-Dichloropropene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Dibromochloromethane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Dibromomethane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2-Dichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-005 **Matrix:** AQUEOUS

Client Sample ID: MKTF-26
Collection Date: 9/24/2014 10:50:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
1,3-Dichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,4-Dichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Dichlorodifluoromethane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1-Dichloroethane	84	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1-Dichloroethene	32	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2-Dichloropropane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,3-Dichloropropane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
2,2-Dichloropropane	ND	2.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1-Dichloropropene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Hexachlorobutadiene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
2-Hexanone	ND	10	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Isopropylbenzene	7.3	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
4-Isopropyltoluene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
4-Methyl-2-pentanone	ND	10	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Methylene Chloride	ND	3.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
n-Butylbenzene	ND	3.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
n-Propylbenzene	5.0	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
sec-Butylbenzene	1.3	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Styrene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
tert-Butylbenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Tetrachloroethene (PCE)	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
trans-1,2-DCE	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
trans-1,3-Dichloropropene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1,1-Trichloroethane	2.5	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,1,2-Trichloroethane	1.1	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Trichloroethene (TCE)	1.7	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Trichlorofluoromethane	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
1,2,3-Trichloropropane	ND	2.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Vinyl chloride	ND	1.0	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Xylenes, Total	1.6	1.5	p	µg/L	1	10/4/2014 3:35:12 AM	R21646
Surr: 1,2-Dichloroethane-d4	92.9	70-130	p	%REC	1	10/4/2014 3:35:12 AM	R21646
Surr: 4-Bromofluorobenzene	108	70-130	p	%REC	1	10/4/2014 3:35:12 AM	R21646
Surr: Dibromofluoromethane	91.1	70-130	p	%REC	1	10/4/2014 3:35:12 AM	R21646
Surr: Toluene-d8	98.2	70-130	p	%REC	1	10/4/2014 3:35:12 AM	R21646

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-006 **Matrix:** AQUEOUS

Client Sample ID: MKTF-24
Collection Date: 9/24/2014 11:15:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 3:02:02 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 3:02:02 AM	15542
Surr: DNOP	119	59-141		%REC	1	9/27/2014 3:02:02 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	6.3	0.50		mg/L	10	10/6/2014 5:53:23 PM	R21689
Surr: BFB	111	70.9-130		%REC	10	10/6/2014 5:53:23 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014 11:15:00 AM
Lab ID: 1409D04-006
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 9:05:35 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014 11:15:00 AM
Lab ID: 1409D04-006
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 9:05:35 PM	15566
Surr: 2-Fluorophenol	70.5	12.1-85.8		%REC	1	9/29/2014 9:05:35 PM	15566
Surr: Phenol-d5	61.2	17.7-65.8		%REC	1	9/29/2014 9:05:35 PM	15566
Surr: 2,4,6-Tribromophenol	82.8	26-138		%REC	1	9/29/2014 9:05:35 PM	15566
Surr: Nitrobenzene-d5	80.9	47.5-119		%REC	1	9/29/2014 9:05:35 PM	15566
Surr: 2-Fluorobiphenyl	83.3	48.1-106		%REC	1	9/29/2014 9:05:35 PM	15566
Surr: 4-Terphenyl-d14	89.1	44-113		%REC	1	9/29/2014 9:05:35 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	1600	20		µg/L	20	10/4/2014 5:39:28 PM	R21669
Toluene	8.7	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Ethylbenzene	58	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Methyl tert-butyl ether (MTBE)	170	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2,4-Trimethylbenzene	2.3	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2-Dichloroethane (EDC)	9.8	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Naphthalene	ND	4.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1-Methylnaphthalene	ND	8.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
2-Methylnaphthalene	ND	8.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Acetone	ND	20		µg/L	2	10/4/2014 4:04:50 AM	R21646
Bromobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Bromodichloromethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Bromoform	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Bromomethane	ND	6.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
2-Butanone	ND	20		µg/L	2	10/4/2014 4:04:50 AM	R21646
Carbon disulfide	ND	20		µg/L	2	10/4/2014 4:04:50 AM	R21646
Carbon Tetrachloride	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Chlorobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Chloroethane	ND	4.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Chloroform	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Chloromethane	ND	6.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
2-Chlorotoluene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
4-Chlorotoluene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
cis-1,2-DCE	44	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Dibromochloromethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Dibromomethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2-Dichlorobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-006 **Matrix:** AQUEOUS

Client Sample ID: MKTF-24
Collection Date: 9/24/2014 11:15:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
1,3-Dichlorobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,4-Dichlorobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Dichlorodifluoromethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1-Dichloroethane	140	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1-Dichloroethene	67	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2-Dichloropropane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,3-Dichloropropane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
2,2-Dichloropropane	ND	4.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1-Dichloropropene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Hexachlorobutadiene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
2-Hexanone	ND	20		µg/L	2	10/4/2014 4:04:50 AM	R21646
Isopropylbenzene	24	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
4-Isopropyltoluene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
4-Methyl-2-pentanone	ND	20		µg/L	2	10/4/2014 4:04:50 AM	R21646
Methylene Chloride	ND	6.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
n-Butylbenzene	8.7	6.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
n-Propylbenzene	39	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
sec-Butylbenzene	6.5	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Styrene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
tert-Butylbenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
trans-1,2-DCE	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1,1-Trichloroethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,1,2-Trichloroethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Trichloroethene (TCE)	5.0	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Trichlorofluoromethane	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
1,2,3-Trichloropropane	ND	4.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Vinyl chloride	ND	2.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Xylenes, Total	ND	3.0		µg/L	2	10/4/2014 4:04:50 AM	R21646
Surr: 1,2-Dichloroethane-d4	86.3	70-130		%REC	2	10/4/2014 4:04:50 AM	R21646
Surr: 4-Bromofluorobenzene	108	70-130		%REC	2	10/4/2014 4:04:50 AM	R21646
Surr: Dibromofluoromethane	90.6	70-130		%REC	2	10/4/2014 4:04:50 AM	R21646
Surr: Toluene-d8	92.3	70-130		%REC	2	10/4/2014 4:04:50 AM	R21646

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-34
Collection Date: 9/24/2014 3:20:00 PM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 3:32:05 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 3:32:05 AM	15542
Surr: DNOP	126	59-141		%REC	1	9/27/2014 3:32:05 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2014 6:23:34 PM	R21689
Surr: BFB	95.7	70.9-130		%REC	1	10/6/2014 6:23:34 PM	R21689
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-34
Collection Date: 9/24/2014 3:20:00 PM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 9:33:35 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-34
Collection Date: 9/24/2014 3:20:00 PM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 9:33:35 PM	15566
Surr: 2-Fluorophenol	69.1	12.1-85.8		%REC	1	9/29/2014 9:33:35 PM	15566
Surr: Phenol-d5	59.7	17.7-65.8		%REC	1	9/29/2014 9:33:35 PM	15566
Surr: 2,4,6-Tribromophenol	84.4	26-138		%REC	1	9/29/2014 9:33:35 PM	15566
Surr: Nitrobenzene-d5	84.1	47.5-119		%REC	1	9/29/2014 9:33:35 PM	15566
Surr: 2-Fluorobiphenyl	81.6	48.1-106		%REC	1	9/29/2014 9:33:35 PM	15566
Surr: 4-Terphenyl-d14	84.8	44-113		%REC	1	9/29/2014 9:33:35 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Toluene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Naphthalene	ND	2.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Acetone	ND	10		µg/L	1	10/4/2014 4:34:22 AM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Bromoform	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Bromomethane	ND	3.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
2-Butanone	ND	10		µg/L	1	10/4/2014 4:34:22 AM	R21646
Carbon disulfide	ND	10		µg/L	1	10/4/2014 4:34:22 AM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Chloroethane	ND	2.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Chloroform	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Chloromethane	ND	3.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-34
Collection Date: 9/24/2014 3:20:00 PM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1-Dichloroethene	1.1	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
2-Hexanone	ND	10		µg/L	1	10/4/2014 4:34:22 AM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2014 4:34:22 AM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Styrene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Trichloroethene (TCE)	2.2	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/4/2014 4:34:22 AM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/4/2014 4:34:22 AM	R21646
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/4/2014 4:34:22 AM	R21646
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	1	10/4/2014 4:34:22 AM	R21646
Surr: Dibromofluoromethane	89.8	70-130		%REC	1	10/4/2014 4:34:22 AM	R21646
Surr: Toluene-d8	97.4	70-130		%REC	1	10/4/2014 4:34:22 AM	R21646

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014 3:45:00 PM
Lab ID: 1409D04-008
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	61	1.0		mg/L	1	9/27/2014 4:02:05 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 4:02:05 AM	15542
Surr: DNOP	132	59-141		%REC	1	9/27/2014 4:02:05 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	16	2.5		mg/L	50	10/4/2014 2:19:46 AM	R21651
Surr: BFB	96.7	70.9-130		%REC	50	10/4/2014 2:19:46 AM	R21651
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Carbazole	10	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-008 **Matrix:** AQUEOUS

Client Sample ID: MKTF-19
Collection Date: 9/24/2014 3:45:00 PM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
1-Methylnaphthalene	180	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2-Methylnaphthalene	290	20		µg/L	2	9/30/2014 1:40:30 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Naphthalene	310	20		µg/L	2	9/30/2014 1:40:30 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 10:01:15 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Phenol	11	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014 3:45:00 PM
Lab ID: 1409D04-008
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 10:01:15 PM	15566
Surr: 2-Fluorophenol	64.7	12.1-85.8		%REC	1	9/29/2014 10:01:15 PM	15566
Surr: Phenol-d5	58.9	17.7-65.8		%REC	1	9/29/2014 10:01:15 PM	15566
Surr: 2,4,6-Tribromophenol	105	26-138		%REC	1	9/29/2014 10:01:15 PM	15566
Surr: Nitrobenzene-d5	82.7	47.5-119		%REC	1	9/29/2014 10:01:15 PM	15566
Surr: 2-Fluorobiphenyl	89.8	48.1-106		%REC	1	9/29/2014 10:01:15 PM	15566
Surr: 4-Terphenyl-d14	92.9	44-113		%REC	1	9/29/2014 10:01:15 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	1800	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Toluene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Ethylbenzene	730	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Methyl tert-butyl ether (MTBE)	11000	500		µg/L	500	10/4/2014 6:09:07 PM	R21669
1,2,4-Trimethylbenzene	690	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,3,5-Trimethylbenzene	110	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Naphthalene	500	100		µg/L	50	10/4/2014 5:03:54 AM	R21646
1-Methylnaphthalene	220	200		µg/L	50	10/4/2014 5:03:54 AM	R21646
2-Methylnaphthalene	360	200		µg/L	50	10/4/2014 5:03:54 AM	R21646
Acetone	ND	500		µg/L	50	10/4/2014 5:03:54 AM	R21646
Bromobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Bromodichloromethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Bromoform	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Bromomethane	ND	150		µg/L	50	10/4/2014 5:03:54 AM	R21646
2-Butanone	ND	500		µg/L	50	10/4/2014 5:03:54 AM	R21646
Carbon disulfide	ND	500		µg/L	50	10/4/2014 5:03:54 AM	R21646
Carbon Tetrachloride	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Chlorobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Chloroethane	ND	100		µg/L	50	10/4/2014 5:03:54 AM	R21646
Chloroform	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Chloromethane	ND	150		µg/L	50	10/4/2014 5:03:54 AM	R21646
2-Chlorotoluene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
4-Chlorotoluene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
cis-1,2-DCE	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
cis-1,3-Dichloropropene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	10/4/2014 5:03:54 AM	R21646
Dibromochloromethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Dibromomethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2-Dichlorobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-008 **Matrix:** AQUEOUS

Client Sample ID: MKTF-19
Collection Date: 9/24/2014 3:45:00 PM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,3-Dichlorobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,4-Dichlorobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Dichlorodifluoromethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1-Dichloroethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1-Dichloroethene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2-Dichloropropane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,3-Dichloropropane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
2,2-Dichloropropane	ND	100		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1-Dichloropropene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Hexachlorobutadiene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
2-Hexanone	ND	500		µg/L	50	10/4/2014 5:03:54 AM	R21646
Isopropylbenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
4-Isopropyltoluene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
4-Methyl-2-pentanone	ND	500		µg/L	50	10/4/2014 5:03:54 AM	R21646
Methylene Chloride	ND	150		µg/L	50	10/4/2014 5:03:54 AM	R21646
n-Butylbenzene	ND	150		µg/L	50	10/4/2014 5:03:54 AM	R21646
n-Propylbenzene	100	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
sec-Butylbenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Styrene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
tert-Butylbenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	10/4/2014 5:03:54 AM	R21646
Tetrachloroethene (PCE)	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
trans-1,2-DCE	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
trans-1,3-Dichloropropene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2,3-Trichlorobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2,4-Trichlorobenzene	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1,1-Trichloroethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,1,2-Trichloroethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Trichloroethene (TCE)	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Trichlorofluoromethane	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
1,2,3-Trichloropropane	ND	100		µg/L	50	10/4/2014 5:03:54 AM	R21646
Vinyl chloride	ND	50		µg/L	50	10/4/2014 5:03:54 AM	R21646
Xylenes, Total	760	75		µg/L	50	10/4/2014 5:03:54 AM	R21646
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	50	10/4/2014 5:03:54 AM	R21646
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	50	10/4/2014 5:03:54 AM	R21646
Surr: Dibromofluoromethane	86.7	70-130		%REC	50	10/4/2014 5:03:54 AM	R21646
Surr: Toluene-d8	98.7	70-130		%REC	50	10/4/2014 5:03:54 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-9/24/14
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/24/2014
Lab ID: 1409D04-009
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-009 **Matrix:** AQUEOUS

Client Sample ID: BD-MKTF-9/24/14
Collection Date: 9/24/2014
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JDC
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 10:29:05 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 10:29:05 PM	15566
Surr: 2-Fluorophenol	66.8	12.1-85.8		%REC	1	9/29/2014 10:29:05 PM	15566
Surr: Phenol-d5	63.1	17.7-65.8		%REC	1	9/29/2014 10:29:05 PM	15566
Surr: 2,4,6-Tribromophenol	76.4	26-138		%REC	1	9/29/2014 10:29:05 PM	15566
Surr: Nitrobenzene-d5	98.6	47.5-119		%REC	1	9/29/2014 10:29:05 PM	15566
Surr: 2-Fluorobiphenyl	88.7	48.1-106		%REC	1	9/29/2014 10:29:05 PM	15566
Surr: 4-Terphenyl-d14	91.9	44-113		%REC	1	9/29/2014 10:29:05 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-010 **Matrix:** AQUEOUS

Client Sample ID: FIELD BLANK
Collection Date: 9/24/2014 8:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Toluene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Naphthalene	ND	2.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Acetone	ND	10		µg/L	1	10/4/2014 6:32:32 AM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Bromoform	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Bromomethane	ND	3.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
2-Butanone	ND	10		µg/L	1	10/4/2014 6:32:32 AM	R21646
Carbon disulfide	ND	10		µg/L	1	10/4/2014 6:32:32 AM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Chloroethane	ND	2.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Chloroform	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Chloromethane	ND	3.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,1-Dichloroethene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2014 6:32:32 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-010 **Matrix:** AQUEOUS

Client Sample ID: FIELD BLANK
Collection Date: 9/24/2014 8:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
2-Hexanone	ND	10		µg/L	1	10/4/2014 6:32:32 AM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2014 6:32:32 AM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Styrene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/4/2014 6:32:32 AM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/4/2014 6:32:32 AM	R21646
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	1	10/4/2014 6:32:32 AM	R21646
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/4/2014 6:32:32 AM	R21646
Surr: Dibromofluoromethane	89.1	70-130		%REC	1	10/4/2014 6:32:32 AM	R21646
Surr: Toluene-d8	94.3	70-130		%REC	1	10/4/2014 6:32:32 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-011 **Matrix:** AQUEOUS

Client Sample ID: TRIP BLANK
Collection Date: 9/24/2014 8:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/6/2014 6:53:45 PM	R21689
Surr: BFB	95.8	70.9-130		%REC	1	10/6/2014 6:53:45 PM	R21689
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Toluene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Naphthalene	ND	2.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Acetone	ND	10		µg/L	1	10/4/2014 7:02:02 AM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Bromoform	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Bromomethane	ND	3.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
2-Butanone	ND	10		µg/L	1	10/4/2014 7:02:02 AM	R21646
Carbon disulfide	ND	10		µg/L	1	10/4/2014 7:02:02 AM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Chloroethane	ND	2.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Chloroform	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Chloromethane	ND	3.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1-Dichloroethene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS
Lab ID: 1409D04-011 **Matrix:** AQUEOUS

Client Sample ID: TRIP BLANK
Collection Date: 9/24/2014 8:00:00 AM
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,2-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
2-Hexanone	ND	10		µg/L	1	10/4/2014 7:02:02 AM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/4/2014 7:02:02 AM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Styrene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/4/2014 7:02:02 AM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/4/2014 7:02:02 AM	R21646
Surr: 1,2-Dichloroethane-d4	88.7	70-130		%REC	1	10/4/2014 7:02:02 AM	R21646
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	1	10/4/2014 7:02:02 AM	R21646
Surr: Dibromofluoromethane	90.2	70-130		%REC	1	10/4/2014 7:02:02 AM	R21646
Surr: Toluene-d8	90.5	70-130		%REC	1	10/4/2014 7:02:02 AM	R21646

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **MB-15542** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **PBW** Batch ID: **15542** RunNo: **21478**

Prep Date: **9/26/2014** Analysis Date: **9/26/2014** SeqNo: **629535** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.76		1.000		76.0	59	141			

Sample ID **LCS-15542** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **LCSW** Batch ID: **15542** RunNo: **21478**

Prep Date: **9/26/2014** Analysis Date: **9/26/2014** SeqNo: **629536** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.5	1.0	5.000	0	90.9	69.7	142			
Surr: DNOP	0.45		0.5000		89.5	59	141			

Sample ID **1409D04-001BMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **MKTF-28** Batch ID: **15542** RunNo: **21478**

Prep Date: **9/26/2014** Analysis Date: **9/27/2014** SeqNo: **629538** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	55	159			
Surr: DNOP	0.51		0.5000		102	59	141			

Sample ID **1409D04-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **MKTF-28** Batch ID: **15542** RunNo: **21478**

Prep Date: **9/26/2014** Analysis Date: **9/27/2014** SeqNo: **629539** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.6	1.0	5.000	0	112	55	159	2.72	20	
Surr: DNOP	0.52		0.5000		103	59	141	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.
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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBW** Batch ID: **R21651** RunNo: **21651**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.3	70.9	130			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSW** Batch ID: **R21651** RunNo: **21651**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.4	80	120			
Surr: BFB	20		20.00		101	70.9	130			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBW** Batch ID: **R21689** RunNo: **21689**

Prep Date: Analysis Date: **10/6/2014** SeqNo: **636892** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.6	70.9	130			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSW** Batch ID: **R21689** RunNo: **21689**

Prep Date: Analysis Date: **10/6/2014** SeqNo: **636893** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.48	0.050	0.5000	0	95.2	80	120			
Surr: BFB	20		20.00		98.8	70.9	130			

Sample ID **1409D04-005AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **MKTF-26** Batch ID: **R21689** RunNo: **21689**

Prep Date: Analysis Date: **10/6/2014** SeqNo: **636899** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.3	0.50	5.000	2.842	89.0	70.4	127			
Surr: BFB	210		200.0		104	70.9	130			

Sample ID **1409D04-005AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **MKTF-26** Batch ID: **R21689** RunNo: **21689**

Prep Date: Analysis Date: **10/6/2014** SeqNo: **636900** Units: **mg/L**

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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **1409D04-005AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **MKTF-26** Batch ID: **R21689** RunNo: **21689**

Prep Date: Analysis Date: **10/6/2014** SeqNo: **636900** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.1	0.50	5.000	2.842	85.0	70.4	127	2.84	20	
Surr: BFB	190		200.0		93.4	70.9	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.
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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R21646**	RunNo: **21646**	
Prep Date:	Analysis Date: **10/3/2014**	SeqNo: **635260**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635260** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.1		10.00		90.7	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635262** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	19	1.0	20.00	0	96.4	80	120			
Chlorobenzene	20	1.0	20.00	0	102	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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635262** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	109	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	92.8	70	130			
Surr: 1,2-Dichloroethane-d4	5.1		10.00		51.1	70	130			S
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

Sample ID **1409D04-008a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **MKTF-19** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/4/2014** SeqNo: **635595** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2700	50	1000	1841	83.4	70	130			
Toluene	810	50	1000	21.60	78.9	70	130			
Chlorobenzene	790	50	1000	0	78.6	70	130			
1,1-Dichloroethene	940	50	1000	0	94.3	70	130			
Trichloroethene (TCE)	760	50	1000	0	76.2	70	130			
Surr: 1,2-Dichloroethane-d4	460		500.0		91.8	70	130			
Surr: 4-Bromofluorobenzene	530		500.0		105	70	130			
Surr: Dibromofluoromethane	440		500.0		87.3	70	130			
Surr: Toluene-d8	480		500.0		95.3	70	130			

Sample ID **1409D04-008a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **MKTF-19** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/4/2014** SeqNo: **635596** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3000	50	1000	1841	114	70	130	10.8	20	
Toluene	990	50	1000	21.60	96.9	70	130	20.0	20	
Chlorobenzene	990	50	1000	0	99.1	70	130	23.0	20	R
1,1-Dichloroethene	1100	50	1000	0	115	70	130	19.6	20	
Trichloroethene (TCE)	940	50	1000	0	93.8	70	130	20.7	20	R
Surr: 1,2-Dichloroethane-d4	470		500.0		93.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	540		500.0		109	70	130	0	0	
Surr: Dibromofluoromethane	460		500.0		93.0	70	130	0	0	
Surr: Toluene-d8	490		500.0		97.5	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635612** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.9	70	130			
Toluene	19	1.0	20.00	0	95.9	80	120			
Chlorobenzene	19	1.0	20.00	0	96.2	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	95.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.6	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.8	70	130			
Surr: Toluene-d8	9.3		10.00		93.3	70	130			

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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.
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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R21646**	RunNo: **21646**	
Prep Date:	Analysis Date: **10/3/2014**	SeqNo: **635614**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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.
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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**

Prep Date: Analysis Date: **10/3/2014** SeqNo: **635614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.1	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21669** RunNo: **21669**

Prep Date: Analysis Date: **10/4/2014** SeqNo: **635898** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.7	70	130			
Surr: Toluene-d8	9.2		10.00		92.4	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R21669** RunNo: **21669**

Prep Date: Analysis Date: **10/4/2014** SeqNo: **635901** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.6	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.6	70	130			
Surr: Toluene-d8	9.4		10.00		93.5	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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **mb-15566** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**

Client ID: **PBW** Batch ID: **15566** RunNo: **21529**

Prep Date: **9/29/2014** Analysis Date: **9/29/2014** SeqNo: **630020** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **mb-15566** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**

Client ID: **PBW** Batch ID: **15566** RunNo: **21529**

Prep Date: **9/29/2014** Analysis Date: **9/29/2014** SeqNo: **630020** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.1	12.1	85.8			
Surr: Phenol-d5	110		200.0		57.0	17.7	65.8			
Surr: 2,4,6-Tribromophenol	170		200.0		83.4	26	138			
Surr: Nitrobenzene-d5	76		100.0		76.4	47.5	119			
Surr: 2-Fluorobiphenyl	72		100.0		72.5	48.1	106			
Surr: 4-Terphenyl-d14	86		100.0		85.8	44	113			

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#: **1409D04**

08-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 3rd QUARTER MKTF WELLS

Sample ID **lcs-15566** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**

Client ID: **LCSW** Batch ID: **15566** RunNo: **21529**

Prep Date: **9/29/2014** Analysis Date: **9/29/2014** SeqNo: **630021** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	80.2	47.9	114			
4-Chloro-3-methylphenol	170	10	200.0	0	86.9	51.7	122			
2-Chlorophenol	160	10	200.0	0	79.9	40.7	113			
1,4-Dichlorobenzene	68	10	100.0	0	67.6	39.6	99.9			
2,4-Dinitrotoluene	82	10	100.0	0	81.6	40.8	113			
N-Nitrosodi-n-propylamine	76	10	100.0	0	75.7	51.2	111			
4-Nitrophenol	140	10	200.0	0	69.3	15.7	86.9			
Pentachlorophenol	140	20	200.0	0	69.9	21.6	104			
Phenol	130	10	200.0	0	65.2	28.6	71.7			
Pyrene	89	10	100.0	0	89.4	54.2	128			
1,2,4-Trichlorobenzene	75	10	100.0	0	75.3	40.9	101			
Surr: 2-Fluorophenol	120		200.0		61.2	12.1	85.8			
Surr: Phenol-d5	110		200.0		55.4	17.7	65.8			
Surr: 2,4,6-Tribromophenol	170		200.0		86.0	26	138			
Surr: Nitrobenzene-d5	81		100.0		80.6	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.9	48.1	106			
Surr: 4-Terphenyl-d14	92		100.0		92.1	44	113			

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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1409D04 RcptNo: 1

Received by/date: MG 09/25/14

Logged By: **Michelle Garcia** 9/25/2014 4:00:00 PM Michelle Garcia

Completed By: **Michelle Garcia** 9/25/2014 5:52:36 PM Michelle Garcia

Reviewed By: ZO 09/26/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2014 3rd QUARTER MKTF WELLS

(MKTF - 19, 24, 26, 27, 28, 29, 30, 34)

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409D04	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions										Air Bubbles (Y or N)
9/24/2014	0920	H20	MKTF-28	MISC	HCL	-001	X	X	X													
9/24/2014	0945	H20	MKTF-29	MISC	HCL	-002	X	X	X													
9/24/2014	1000	H20	MKTF-30	MISC	HCL	-003	X	X	X													
9/24/2014	1025	H20	MKTF-27	MISC	HCL	-004	X	X	X													
9/24/2014	1050	H20	MKTF-26	MISC	HCL	-005	X	X	X													
9/24/2014	1115	H20	MKTF-24	MISC	HCL	-006	X	X	X													
9/24/2014	1520	H20	MKTF-34	MISC	HCL	-007	X	X	X													
9/24/2014	1545	H20	MKTF-19	MISC	HCL	-008	X	X	X													
9/24/2014		H20	BD-MKTF-9/24/14	1L AMBER	NONE	-009			X													
9/24/2014	0800	H20	FIELD BLANK	3-40ML VOA	HCL	-010	X															
9/24/2014	0800	H20	TRIP BLANK	3-40ML VOA	HCL	-011	X	X														

Date	Time	Relinquished by:	Received by:	Date	Time
9/25/2014	1030			92514	1030
92514	1600		Michelle Garcia	09/25/14	1600

Remarks: GRO

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.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

October 17, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 Annual GW

OrderNo.: 1409A33

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 12 sample(s) on 9/19/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2014 Annual GW
Collection Date:
Lab ID: 1409A33-001
Matrix: TRIP BLANK
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/24/2014 4:56:37 PM	R21431
Surr: BFB	88.6	70.9-130		%REC	1	9/24/2014 4:56:37 PM	R21431
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Toluene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Ethylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Naphthalene	ND	2.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1-Methylnaphthalene	ND	4.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
2-Methylnaphthalene	ND	4.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Acetone	ND	10		µg/L	1	9/25/2014 5:46:12 PM	R21469
Bromobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Bromodichloromethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Bromoform	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Bromomethane	ND	3.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
2-Butanone	ND	10		µg/L	1	9/25/2014 5:46:12 PM	R21469
Carbon disulfide	ND	10		µg/L	1	9/25/2014 5:46:12 PM	R21469
Carbon Tetrachloride	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Chlorobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Chloroethane	ND	2.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Chloroform	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Chloromethane	ND	3.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
2-Chlorotoluene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
4-Chlorotoluene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
cis-1,2-DCE	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Dibromochloromethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Dibromomethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1-Dichloroethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1-Dichloroethene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-001
Matrix: TRIP BLANK
Client Sample ID: TRIP BLANK
Collection Date:
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,2-Dichloropropane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,3-Dichloropropane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
2,2-Dichloropropane	ND	2.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1-Dichloropropene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Hexachlorobutadiene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
2-Hexanone	ND	10		µg/L	1	9/25/2014 5:46:12 PM	R21469
Isopropylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
4-Isopropyltoluene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
4-Methyl-2-pentanone	ND	10		µg/L	1	9/25/2014 5:46:12 PM	R21469
Methylene Chloride	ND	3.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
n-Butylbenzene	ND	3.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
n-Propylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
sec-Butylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Styrene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
tert-Butylbenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
trans-1,2-DCE	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Trichlorofluoromethane	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Vinyl chloride	ND	1.0		µg/L	1	9/25/2014 5:46:12 PM	R21469
Xylenes, Total	ND	1.5		µg/L	1	9/25/2014 5:46:12 PM	R21469
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	9/25/2014 5:46:12 PM	R21469
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	1	9/25/2014 5:46:12 PM	R21469
Surr: Dibromofluoromethane	92.3	70-130		%REC	1	9/25/2014 5:46:12 PM	R21469
Surr: Toluene-d8	90.1	70-130		%REC	1	9/25/2014 5:46:12 PM	R21469

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-002 **Matrix:** AQUEOUS

Client Sample ID: BD-MKTF-9/15/14
Collection Date: 9/15/2014
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Acenaphthylene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Aniline	28	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Anthracene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Azobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benz(a)anthracene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benzo(a)pyrene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benzo(b)fluoranthene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benzo(g,h,i)perylene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benzo(k)fluoranthene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benzoic acid	ND	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Benzyl alcohol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Bis(2-chloroethoxy)methane	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Bis(2-chloroethyl)ether	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Bis(2-chloroisopropyl)ether	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4-Bromophenyl phenyl ether	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Butyl benzyl phthalate	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Carbazole	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4-Chloro-3-methylphenol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4-Chloroaniline	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2-Chloronaphthalene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2-Chlorophenol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4-Chlorophenyl phenyl ether	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Chrysene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Di-n-butyl phthalate	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Di-n-octyl phthalate	ND	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Dibenz(a,h)anthracene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Dibenzofuran	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
1,2-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
1,3-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
1,4-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
3,3´-Dichlorobenzidine	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Diethyl phthalate	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Dimethyl phthalate	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2,4-Dichlorophenol	ND	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2,4-Dimethylphenol	76	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4,6-Dinitro-2-methylphenol	ND	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2,4-Dinitrophenol	ND	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-002 **Matrix:** AQUEOUS

Client Sample ID: BD-MKTF-9/15/14
Collection Date: 9/15/2014
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JDC
2,4-Dinitrotoluene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2,6-Dinitrotoluene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Fluoranthene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Fluorene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Hexachlorobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Hexachlorobutadiene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Hexachlorocyclopentadiene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Hexachloroethane	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Isophorone	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
1-Methylnaphthalene	18	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2-Methylnaphthalene	12	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2-Methylphenol	180	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440
3+4-Methylphenol	140	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
N-Nitrosodi-n-propylamine	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
N-Nitrosodimethylamine	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
N-Nitrosodiphenylamine	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Naphthalene	50	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
3-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Nitrobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2-Nitrophenol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
4-Nitrophenol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Pentachlorophenol	ND	20	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Phenanthrene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Phenol	39	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Pyrene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Pyridine	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
1,2,4-Trichlorobenzene	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2,4,5-Trichlorophenol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
2,4,6-Trichlorophenol	ND	10	H	µg/L	1	9/24/2014 1:36:46 PM	15440
Surr: 2-Fluorophenol	71.2	12.1-85.8	H	%REC	1	9/24/2014 1:36:46 PM	15440
Surr: Phenol-d5	65.4	17.7-65.8	H	%REC	1	9/24/2014 1:36:46 PM	15440
Surr: 2,4,6-Tribromophenol	73.9	26-138	H	%REC	1	9/24/2014 1:36:46 PM	15440
Surr: Nitrobenzene-d5	87.3	47.5-119	H	%REC	1	9/24/2014 1:36:46 PM	15440
Surr: 2-Fluorobiphenyl	90.1	48.1-106	H	%REC	1	9/24/2014 1:36:46 PM	15440
Surr: 4-Terphenyl-d14	96.2	44-113	H	%REC	1	9/24/2014 1:36:46 PM	15440

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-003 **Matrix:** AQUEOUS

Client Sample ID: FB-Group 7-9/15/14
Collection Date: 9/15/2014 9:45:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
Benzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Toluene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Ethylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Naphthalene	ND	2.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1-Methylnaphthalene	ND	4.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
2-Methylnaphthalene	ND	4.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Acetone	ND	10		µg/L	1	9/25/2014 6:15:53 PM	R21469
Bromobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Bromodichloromethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Bromoform	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Bromomethane	ND	3.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
2-Butanone	ND	10		µg/L	1	9/25/2014 6:15:53 PM	R21469
Carbon disulfide	ND	10		µg/L	1	9/25/2014 6:15:53 PM	R21469
Carbon Tetrachloride	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Chlorobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Chloroethane	ND	2.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Chloroform	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Chloromethane	ND	3.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
2-Chlorotoluene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
4-Chlorotoluene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
cis-1,2-DCE	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Dibromochloromethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Dibromomethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,1-Dichloroethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,1-Dichloroethene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2-Dichloropropane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,3-Dichloropropane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
2,2-Dichloropropane	ND	2.0		µg/L	1	9/25/2014 6:15:53 PM	R21469

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-003 **Matrix:** AQUEOUS

Client Sample ID: FB-Group 7-9/15/14
Collection Date: 9/15/2014 9:45:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Hexachlorobutadiene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
2-Hexanone	ND	10		µg/L	1	9/25/2014 6:15:53 PM	R21469
Isopropylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
4-Isopropyltoluene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
4-Methyl-2-pentanone	ND	10		µg/L	1	9/25/2014 6:15:53 PM	R21469
Methylene Chloride	ND	3.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
n-Butylbenzene	ND	3.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
n-Propylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
sec-Butylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Styrene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
tert-Butylbenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
trans-1,2-DCE	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Trichlorofluoromethane	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Vinyl chloride	ND	1.0		µg/L	1	9/25/2014 6:15:53 PM	R21469
Xylenes, Total	ND	1.5		µg/L	1	9/25/2014 6:15:53 PM	R21469
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	1	9/25/2014 6:15:53 PM	R21469
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	1	9/25/2014 6:15:53 PM	R21469
Surr: Dibromofluoromethane	91.2	70-130		%REC	1	9/25/2014 6:15:53 PM	R21469
Surr: Toluene-d8	90.9	70-130		%REC	1	9/25/2014 6:15:53 PM	R21469

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: 2014 Annual GW
Collection Date: 9/15/2014 9:45:00 AM
Lab ID: 1409A33-004
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.5	1.0		mg/L	1	9/23/2014 2:53:08 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 2:53:08 AM	15424
Surr: DNOP	103	59-141		%REC	1	9/23/2014 2:53:08 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	3.4	0.50		mg/L	10	9/24/2014 5:25:13 PM	R21431
Surr: BFB	97.0	70.9-130		%REC	10	9/24/2014 5:25:13 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.78	0.0020		mg/L	1	9/24/2014 4:21:21 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:21:21 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:21:21 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:21:21 PM	R21433
Iron	3.6	0.10	*	mg/L	5	9/24/2014 5:17:08 PM	R21433
Manganese	1.7	0.010	*	mg/L	5	9/24/2014 5:17:08 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:21:21 PM	R21433
Zinc	ND	0.010		mg/L	1	9/24/2014 4:21:21 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.0	0.010	*	mg/L	5	9/25/2014 5:35:10 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:19:12 PM	15445
Chromium	0.015	0.0060		mg/L	1	9/25/2014 2:19:12 PM	15445
Copper	0.021	0.0060		mg/L	1	9/25/2014 2:19:12 PM	15445
Iron	20	1.0	*	mg/L	50	9/25/2014 5:36:50 PM	15445
Manganese	2.9	0.010	*	mg/L	5	9/25/2014 5:35:10 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:19:12 PM	15445
Zinc	0.044	0.010		mg/L	1	9/25/2014 2:19:12 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	10/2/2014 4:24:03 PM	R21629
Lead	0.0013	0.0010		mg/L	1	9/30/2014 1:24:20 PM	R21559
Selenium	ND	0.010		mg/L	10	10/2/2014 4:24:03 PM	R21629
Uranium	0.018	0.0010		mg/L	1	9/30/2014 1:24:20 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0060	0.0050		mg/L	5	10/2/2014 2:53:20 PM	15445
Lead	0.036	0.0010	*	mg/L	1	10/2/2014 1:24:51 PM	15445
Selenium	0.0078	0.0050		mg/L	5	10/2/2014 2:53:20 PM	15445
Uranium	0.020	0.0010		mg/L	1	10/2/2014 1:24:51 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:44:51 PM	15530

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-004 **Matrix:** AQUEOUS

Client Sample ID: MKTF-04
Collection Date: 9/15/2014 9:45:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JDC
Acenaphthene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Acenaphthylene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Aniline	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Anthracene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Azobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benz(a)anthracene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benzo(a)pyrene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benzo(b)fluoranthene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benzo(g,h,i)perylene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benzo(k)fluoranthene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benzoic acid	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Benzyl alcohol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Bis(2-chloroethoxy)methane	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Bis(2-chloroethyl)ether	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Bis(2-chloroisopropyl)ether	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4-Bromophenyl phenyl ether	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Butyl benzyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Carbazole	15	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4-Chloro-3-methylphenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4-Chloroaniline	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2-Chloronaphthalene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2-Chlorophenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4-Chlorophenyl phenyl ether	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Chrysene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Di-n-butyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Di-n-octyl phthalate	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Dibenz(a,h)anthracene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Dibenzofuran	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
1,2-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
1,3-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
1,4-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
3,3′-Dichlorobenzidine	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Diethyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Dimethyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2,4-Dichlorophenol	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2,4-Dimethylphenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4,6-Dinitro-2-methylphenol	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2,4-Dinitrophenol	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-004 **Matrix:** AQUEOUS

Client Sample ID: MKTF-04
Collection Date: 9/15/2014 9:45:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2,6-Dinitrotoluene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Fluoranthene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Fluorene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Hexachlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Hexachlorobutadiene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Hexachlorocyclopentadiene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Hexachloroethane	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Isophorone	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
1-Methylnaphthalene	89	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2-Methylnaphthalene	97	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2-Methylphenol	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440
3+4-Methylphenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
N-Nitrosodi-n-propylamine	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
N-Nitrosodimethylamine	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
N-Nitrosodiphenylamine	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Naphthalene	150	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
3-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Nitrobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2-Nitrophenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
4-Nitrophenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Pentachlorophenol	ND	20	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Phenanthrene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Phenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Pyrene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Pyridine	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
1,2,4-Trichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2,4,5-Trichlorophenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
2,4,6-Trichlorophenol	ND	10	H	µg/L	1	9/24/2014 2:06:01 PM	15440
Surr: 2-Fluorophenol	87.8	12.1-85.8	SH	%REC	1	9/24/2014 2:06:01 PM	15440
Surr: Phenol-d5	70.9	17.7-65.8	SH	%REC	1	9/24/2014 2:06:01 PM	15440
Surr: 2,4,6-Tribromophenol	85.8	26-138	H	%REC	1	9/24/2014 2:06:01 PM	15440
Surr: Nitrobenzene-d5	95.7	47.5-119	H	%REC	1	9/24/2014 2:06:01 PM	15440
Surr: 2-Fluorobiphenyl	96.0	48.1-106	H	%REC	1	9/24/2014 2:06:01 PM	15440
Surr: 4-Terphenyl-d14	106	44-113	H	%REC	1	9/24/2014 2:06:01 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-004 **Matrix:** AQUEOUS

Client Sample ID: MKTF-04
Collection Date: 9/15/2014 9:45:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
Benzene	150	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Toluene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Ethylbenzene	140	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Methyl tert-butyl ether (MTBE)	1400	50		µg/L	50	9/25/2014 6:45:32 PM	R21469
1,2,4-Trimethylbenzene	96	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,3,5-Trimethylbenzene	12	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Naphthalene	92	10		µg/L	5	9/25/2014 7:15:10 PM	R21469
1-Methylnaphthalene	41	20		µg/L	5	9/25/2014 7:15:10 PM	R21469
2-Methylnaphthalene	33	20		µg/L	5	9/25/2014 7:15:10 PM	R21469
Acetone	ND	50		µg/L	5	9/25/2014 7:15:10 PM	R21469
Bromobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Bromodichloromethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Bromoform	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Bromomethane	ND	15		µg/L	5	9/25/2014 7:15:10 PM	R21469
2-Butanone	ND	50		µg/L	5	9/25/2014 7:15:10 PM	R21469
Carbon disulfide	ND	50		µg/L	5	9/25/2014 7:15:10 PM	R21469
Carbon Tetrachloride	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Chlorobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Chloroethane	ND	10		µg/L	5	9/25/2014 7:15:10 PM	R21469
Chloroform	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Chloromethane	ND	15		µg/L	5	9/25/2014 7:15:10 PM	R21469
2-Chlorotoluene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
4-Chlorotoluene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
cis-1,2-DCE	14	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	9/25/2014 7:15:10 PM	R21469
Dibromochloromethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Dibromomethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2-Dichlorobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,3-Dichlorobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,4-Dichlorobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Dichlorodifluoromethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,1-Dichloroethane	37	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,1-Dichloroethene	74	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2-Dichloropropane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,3-Dichloropropane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
2,2-Dichloropropane	ND	10		µg/L	5	9/25/2014 7:15:10 PM	R21469

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: 2014 Annual GW
Collection Date: 9/15/2014 9:45:00 AM
Lab ID: 1409A33-004
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
1,1-Dichloropropene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Hexachlorobutadiene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
2-Hexanone	ND	50		µg/L	5	9/25/2014 7:15:10 PM	R21469
Isopropylbenzene	11	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
4-Isopropyltoluene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
4-Methyl-2-pentanone	ND	50		µg/L	5	9/25/2014 7:15:10 PM	R21469
Methylene Chloride	ND	15		µg/L	5	9/25/2014 7:15:10 PM	R21469
n-Butylbenzene	ND	15		µg/L	5	9/25/2014 7:15:10 PM	R21469
n-Propylbenzene	19	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
sec-Butylbenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Styrene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
tert-Butylbenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	9/25/2014 7:15:10 PM	R21469
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
trans-1,2-DCE	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,1,1-Trichloroethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,1,2-Trichloroethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Trichloroethene (TCE)	5.1	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Trichlorofluoromethane	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
1,2,3-Trichloropropane	ND	10		µg/L	5	9/25/2014 7:15:10 PM	R21469
Vinyl chloride	ND	5.0		µg/L	5	9/25/2014 7:15:10 PM	R21469
Xylenes, Total	140	7.5		µg/L	5	9/25/2014 7:15:10 PM	R21469
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	5	9/25/2014 7:15:10 PM	R21469
Surr: 4-Bromofluorobenzene	113	70-130		%REC	5	9/25/2014 7:15:10 PM	R21469
Surr: Dibromofluoromethane	90.5	70-130		%REC	5	9/25/2014 7:15:10 PM	R21469
Surr: Toluene-d8	92.5	70-130		%REC	5	9/25/2014 7:15:10 PM	R21469

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-005 **Matrix:** AQUEOUS

Client Sample ID: MKTF-11
Collection Date: 9/15/2014 10:30:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.8	1.0		mg/L	1	9/23/2014 4:22:20 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 4:22:20 AM	15424
Surr: DNOP	106	59-141		%REC	1	9/23/2014 4:22:20 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	57	1.0	P	mg/L	20	9/24/2014 6:51:07 PM	R21431
Surr: BFB	99.6	70.9-130	P	%REC	20	9/24/2014 6:51:07 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.1	0.010		mg/L	5	9/24/2014 5:18:57 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:23:08 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:23:08 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:23:08 PM	R21433
Iron	2.7	0.10	*	mg/L	5	9/24/2014 5:18:57 PM	R21433
Manganese	2.4	0.010	*	mg/L	5	9/24/2014 5:18:57 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:23:08 PM	R21433
Zinc	ND	0.010		mg/L	1	9/24/2014 4:23:08 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.4	0.020		mg/L	10	9/25/2014 5:38:46 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:21:05 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 2:21:05 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 2:21:05 PM	15445
Iron	8.1	0.20	*	mg/L	10	9/25/2014 5:38:46 PM	15445
Manganese	3.1	0.020	*	mg/L	10	9/25/2014 5:38:46 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:21:05 PM	15445
Zinc	0.021	0.010		mg/L	1	9/25/2014 2:21:05 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0086	0.0050		mg/L	5	10/2/2014 4:27:08 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 1:27:26 PM	R21559
Selenium	ND	0.0050		mg/L	5	10/2/2014 4:27:08 PM	R21629
Uranium	0.0040	0.0010		mg/L	1	9/30/2014 1:27:26 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0072	0.0010		mg/L	1	10/2/2014 1:27:57 PM	15445
Lead	0.0062	0.0010		mg/L	1	10/2/2014 1:27:57 PM	15445
Selenium	0.0029	0.0010		mg/L	1	10/2/2014 1:27:57 PM	15445
Uranium	0.0058	0.0010		mg/L	1	10/2/2014 1:27:57 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:46:42 PM	15530

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Hall Environmental Analysis Laboratory, Inc.

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Project: 2014 Annual GW
Collection Date: 9/15/2014 10:30:00 AM
Lab ID: 1409A33-005
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Acenaphthylene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Aniline	24	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Anthracene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Azobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benz(a)anthracene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benzo(a)pyrene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benzo(b)fluoranthene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benzo(g,h,i)perylene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benzo(k)fluoranthene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benzoic acid	ND	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Benzyl alcohol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Bis(2-chloroethoxy)methane	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Bis(2-chloroethyl)ether	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Bis(2-chloroisopropyl)ether	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4-Bromophenyl phenyl ether	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Butyl benzyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Carbazole	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4-Chloro-3-methylphenol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4-Chloroaniline	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2-Chloronaphthalene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2-Chlorophenol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4-Chlorophenyl phenyl ether	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Chrysene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Di-n-butyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Di-n-octyl phthalate	ND	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Dibenz(a,h)anthracene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Dibenzofuran	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
1,2-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
1,3-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
1,4-Dichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
3,3'-Dichlorobenzidine	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Diethyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Dimethyl phthalate	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2,4-Dichlorophenol	ND	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2,4-Dimethylphenol	59	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4,6-Dinitro-2-methylphenol	ND	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2,4-Dinitrophenol	ND	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Lab ID: 1409A33-005 **Matrix:** AQUEOUS

Client Sample ID: MKTF-11
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Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2,6-Dinitrotoluene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Fluoranthene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Fluorene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Hexachlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Hexachlorobutadiene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Hexachlorocyclopentadiene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Hexachloroethane	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Isophorone	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
1-Methylnaphthalene	14	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2-Methylnaphthalene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2-Methylphenol	150	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440
3+4-Methylphenol	110	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
N-Nitrosodi-n-propylamine	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
N-Nitrosodimethylamine	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
N-Nitrosodiphenylamine	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Naphthalene	39	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
3-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4-Nitroaniline	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Nitrobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2-Nitrophenol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
4-Nitrophenol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Pentachlorophenol	ND	20	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Phenanthrene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Phenol	31	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Pyrene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Pyridine	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
1,2,4-Trichlorobenzene	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2,4,5-Trichlorophenol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
2,4,6-Trichlorophenol	ND	10	H	µg/L	1	9/24/2014 2:35:14 PM	15440
Surr: 2-Fluorophenol	68.0	12.1-85.8	H	%REC	1	9/24/2014 2:35:14 PM	15440
Surr: Phenol-d5	55.1	17.7-65.8	H	%REC	1	9/24/2014 2:35:14 PM	15440
Surr: 2,4,6-Tribromophenol	64.6	26-138	H	%REC	1	9/24/2014 2:35:14 PM	15440
Surr: Nitrobenzene-d5	73.6	47.5-119	H	%REC	1	9/24/2014 2:35:14 PM	15440
Surr: 2-Fluorobiphenyl	76.6	48.1-106	H	%REC	1	9/24/2014 2:35:14 PM	15440
Surr: 4-Terphenyl-d14	83.3	44-113	H	%REC	1	9/24/2014 2:35:14 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
Benzene	9500	500		µg/L	500	9/25/2014 8:14:37 PM	R21469
Toluene	7100	500		µg/L	500	9/25/2014 8:14:37 PM	R21469
Ethylbenzene	720	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Methyl tert-butyl ether (MTBE)	83	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2,4-Trimethylbenzene	360	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,3,5-Trimethylbenzene	58	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Naphthalene	ND	100		µg/L	50	9/25/2014 8:44:18 PM	R21469
1-Methylnaphthalene	ND	200		µg/L	50	9/25/2014 8:44:18 PM	R21469
2-Methylnaphthalene	ND	200		µg/L	50	9/25/2014 8:44:18 PM	R21469
Acetone	ND	500		µg/L	50	9/25/2014 8:44:18 PM	R21469
Bromobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Bromodichloromethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Bromoform	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Bromomethane	ND	150		µg/L	50	9/25/2014 8:44:18 PM	R21469
2-Butanone	ND	500		µg/L	50	9/25/2014 8:44:18 PM	R21469
Carbon disulfide	ND	500		µg/L	50	9/25/2014 8:44:18 PM	R21469
Carbon Tetrachloride	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Chlorobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Chloroethane	ND	100		µg/L	50	9/25/2014 8:44:18 PM	R21469
Chloroform	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Chloromethane	ND	150		µg/L	50	9/25/2014 8:44:18 PM	R21469
2-Chlorotoluene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
4-Chlorotoluene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
cis-1,2-DCE	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/25/2014 8:44:18 PM	R21469
Dibromochloromethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Dibromomethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2-Dichlorobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,3-Dichlorobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,4-Dichlorobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Dichlorodifluoromethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,1-Dichloroethane	57	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,1-Dichloroethene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2-Dichloropropane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,3-Dichloropropane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
2,2-Dichloropropane	ND	100		µg/L	50	9/25/2014 8:44:18 PM	R21469

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
1,1-Dichloropropene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Hexachlorobutadiene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
2-Hexanone	ND	500		µg/L	50	9/25/2014 8:44:18 PM	R21469
Isopropylbenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
4-Isopropyltoluene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
4-Methyl-2-pentanone	ND	500		µg/L	50	9/25/2014 8:44:18 PM	R21469
Methylene Chloride	ND	150		µg/L	50	9/25/2014 8:44:18 PM	R21469
n-Butylbenzene	ND	150		µg/L	50	9/25/2014 8:44:18 PM	R21469
n-Propylbenzene	69	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
sec-Butylbenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Styrene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
tert-Butylbenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/25/2014 8:44:18 PM	R21469
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
trans-1,2-DCE	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,1,1-Trichloroethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,1,2-Trichloroethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Trichloroethene (TCE)	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Trichlorofluoromethane	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
1,2,3-Trichloropropane	ND	100		µg/L	50	9/25/2014 8:44:18 PM	R21469
Vinyl chloride	ND	50		µg/L	50	9/25/2014 8:44:18 PM	R21469
Xylenes, Total	2000	75		µg/L	50	9/25/2014 8:44:18 PM	R21469
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	50	9/25/2014 8:44:18 PM	R21469
Surr: 4-Bromofluorobenzene	103	70-130		%REC	50	9/25/2014 8:44:18 PM	R21469
Surr: Dibromofluoromethane	88.8	70-130		%REC	50	9/25/2014 8:44:18 PM	R21469
Surr: Toluene-d8	94.9	70-130		%REC	50	9/25/2014 8:44:18 PM	R21469

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-15
Project: 2014 Annual GW
Collection Date: 9/17/2014 9:40:00 AM
Lab ID: 1409A33-006
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	17	1.0		mg/L	1	9/23/2014 4:51:48 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 4:51:48 AM	15424
Surr: DNOP	105	59-141		%REC	1	9/23/2014 4:51:48 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	88	1.0		mg/L	20	9/24/2014 9:14:07 PM	R21431
Surr: BFB	123	70.9-130		%REC	20	9/24/2014 9:14:07 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	27	0.20	*	mg/L	100	9/24/2014 5:22:32 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:25:01 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:25:01 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:25:01 PM	R21433
Iron	13	2.0	*	mg/L	100	9/24/2014 5:22:32 PM	R21433
Manganese	9.0	0.020	*	mg/L	10	9/24/2014 5:20:47 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:25:01 PM	R21433
Zinc	ND	0.010		mg/L	1	9/24/2014 4:25:01 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	29	0.20	*	mg/L	100	9/25/2014 5:42:09 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:23:04 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 2:23:04 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 2:23:04 PM	15445
Iron	18	2.0	*	mg/L	100	9/25/2014 5:42:09 PM	15445
Manganese	9.8	0.020	*	mg/L	10	9/25/2014 5:40:24 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:23:04 PM	15445
Zinc	0.023	0.010		mg/L	1	9/25/2014 2:23:04 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	10/2/2014 4:30:14 PM	R21629
Lead	ND	0.010		mg/L	10	10/2/2014 4:30:14 PM	R21629
Selenium	ND	0.010		mg/L	10	10/2/2014 4:30:14 PM	R21629
Uranium	ND	0.010		mg/L	10	10/2/2014 4:30:14 PM	R21629
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	10/2/2014 2:56:27 PM	15445
Lead	ND	0.010		mg/L	10	10/8/2014 2:54:21 PM	15445
Selenium	ND	0.0050		mg/L	5	10/2/2014 2:56:27 PM	15445
Uranium	ND	0.010		mg/L	10	10/8/2014 2:54:21 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:48:34 PM	15530

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-006 **Matrix:** AQUEOUS

Client Sample ID: MKTF-15
Collection Date: 9/17/2014 9:40:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JDC
Acenaphthene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Aniline	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 3:04:33 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 3:04:33 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 3:04:33 PM	15440
2,4-Dimethylphenol	13	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 3:04:33 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 3:04:33 PM	15440

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: MKTF-15
Project: 2014 Annual GW
Collection Date: 9/17/2014 9:40:00 AM
Lab ID: 1409A33-006
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
1-Methylnaphthalene	35	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2-Methylnaphthalene	33	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2-Methylphenol	24	20		µg/L	1	9/24/2014 3:04:33 PM	15440
3+4-Methylphenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Naphthalene	48	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 3:04:33 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Phenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 3:04:33 PM	15440
Surr: 2-Fluorophenol	49.3	12.1-85.8		%REC	1	9/24/2014 3:04:33 PM	15440
Surr: Phenol-d5	44.6	17.7-65.8		%REC	1	9/24/2014 3:04:33 PM	15440
Surr: 2,4,6-Tribromophenol	82.1	26-138		%REC	1	9/24/2014 3:04:33 PM	15440
Surr: Nitrobenzene-d5	65.6	47.5-119		%REC	1	9/24/2014 3:04:33 PM	15440
Surr: 2-Fluorobiphenyl	75.0	48.1-106		%REC	1	9/24/2014 3:04:33 PM	15440
Surr: 4-Terphenyl-d14	88.9	44-113		%REC	1	9/24/2014 3:04:33 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-006 **Matrix:** AQUEOUS

Client Sample ID: MKTF-15
Collection Date: 9/17/2014 9:40:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
Benzene	11000	500		µg/L	500	9/25/2014 9:43:37 PM	R21469
Toluene	7000	500		µg/L	500	9/25/2014 9:43:37 PM	R21469
Ethylbenzene	1400	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Methyl tert-butyl ether (MTBE)	380	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2,4-Trimethylbenzene	660	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,3,5-Trimethylbenzene	180	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Naphthalene	120	100		µg/L	50	9/26/2014 12:11:48 AM	R21469
1-Methylnaphthalene	ND	200		µg/L	50	9/26/2014 12:11:48 AM	R21469
2-Methylnaphthalene	ND	200		µg/L	50	9/26/2014 12:11:48 AM	R21469
Acetone	ND	500		µg/L	50	9/26/2014 12:11:48 AM	R21469
Bromobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Bromodichloromethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Bromoform	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Bromomethane	ND	150		µg/L	50	9/26/2014 12:11:48 AM	R21469
2-Butanone	ND	500		µg/L	50	9/26/2014 12:11:48 AM	R21469
Carbon disulfide	ND	500		µg/L	50	9/26/2014 12:11:48 AM	R21469
Carbon Tetrachloride	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Chlorobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Chloroethane	ND	100		µg/L	50	9/26/2014 12:11:48 AM	R21469
Chloroform	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Chloromethane	ND	150		µg/L	50	9/26/2014 12:11:48 AM	R21469
2-Chlorotoluene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
4-Chlorotoluene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
cis-1,2-DCE	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/26/2014 12:11:48 AM	R21469
Dibromochloromethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Dibromomethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,3-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,4-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Dichlorodifluoromethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,1-Dichloroethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,1-Dichloroethene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2-Dichloropropane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,3-Dichloropropane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
2,2-Dichloropropane	ND	100		µg/L	50	9/26/2014 12:11:48 AM	R21469

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Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Hexachlorobutadiene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
2-Hexanone	ND	500		µg/L	50	9/26/2014 12:11:48 AM	R21469
Isopropylbenzene	68	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
4-Isopropyltoluene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
4-Methyl-2-pentanone	ND	500		µg/L	50	9/26/2014 12:11:48 AM	R21469
Methylene Chloride	ND	150		µg/L	50	9/26/2014 12:11:48 AM	R21469
n-Butylbenzene	ND	150		µg/L	50	9/26/2014 12:11:48 AM	R21469
n-Propylbenzene	140	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
sec-Butylbenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Styrene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
tert-Butylbenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/26/2014 12:11:48 AM	R21469
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
trans-1,2-DCE	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,1,1-Trichloroethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,1,2-Trichloroethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Trichloroethene (TCE)	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Trichlorofluoromethane	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
1,2,3-Trichloropropane	ND	100		µg/L	50	9/26/2014 12:11:48 AM	R21469
Vinyl chloride	ND	50		µg/L	50	9/26/2014 12:11:48 AM	R21469
Xylenes, Total	4300	75		µg/L	50	9/26/2014 12:11:48 AM	R21469
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%REC	50	9/26/2014 12:11:48 AM	R21469
Surr: 4-Bromofluorobenzene	99.1	70-130		%REC	50	9/26/2014 12:11:48 AM	R21469
Surr: Dibromofluoromethane	89.8	70-130		%REC	50	9/26/2014 12:11:48 AM	R21469
Surr: Toluene-d8	96.4	70-130		%REC	50	9/26/2014 12:11:48 AM	R21469

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-16
Collection Date: 9/17/2014 11:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	4.6	1.0		mg/L	1	9/23/2014 5:21:15 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 5:21:15 AM	15424
Surr: DNOP	101	59-141		%REC	1	9/23/2014 5:21:15 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	66	5.0		mg/L	100	9/24/2014 10:11:15 PM	R21431
Surr: BFB	90.7	70.9-130		%REC	100	9/24/2014 10:11:15 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.81	0.0020		mg/L	1	9/24/2014 4:26:55 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:26:55 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:26:55 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:26:55 PM	R21433
Iron	7.3	0.20	*	mg/L	10	9/24/2014 5:24:31 PM	R21433
Manganese	1.1	0.020	*	mg/L	10	9/24/2014 5:24:31 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:26:55 PM	R21433
Zinc	0.017	0.010		mg/L	1	9/24/2014 4:26:55 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.80	0.0020		mg/L	1	9/25/2014 2:25:05 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:25:05 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 2:25:05 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 2:25:05 PM	15445
Iron	8.6	0.20	*	mg/L	10	9/25/2014 5:44:08 PM	15445
Manganese	1.2	0.020	*	mg/L	10	9/25/2014 5:44:08 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:25:05 PM	15445
Zinc	0.034	0.010		mg/L	1	9/25/2014 2:25:05 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.011	0.010	*	mg/L	10	10/2/2014 4:33:19 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 1:33:38 PM	R21559
Selenium	ND	0.010		mg/L	10	10/2/2014 4:33:19 PM	R21629
Uranium	ND	0.0010		mg/L	1	9/30/2014 1:33:38 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.012	0.010	*	mg/L	10	10/2/2014 2:59:33 PM	15445
Lead	0.0031	0.0010		mg/L	1	10/2/2014 1:43:26 PM	15445
Selenium	ND	0.010		mg/L	10	10/2/2014 2:59:33 PM	15445
Uranium	ND	0.0010		mg/L	1	10/2/2014 1:43:26 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:50:17 PM	15530

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-16
Collection Date: 9/17/2014 11:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Aniline	24	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 3:33:47 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 3:33:47 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 3:33:47 PM	15440
2,4-Dimethylphenol	180	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 3:33:47 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 3:33:47 PM	15440

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 Annual GW
Collection Date: 9/17/2014 11:00:00 AM
Lab ID: 1409A33-007
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
1-Methylnaphthalene	53	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2-Methylnaphthalene	62	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2-Methylphenol	150	20		µg/L	1	9/24/2014 3:33:47 PM	15440
3+4-Methylphenol	30	10		µg/L	1	9/24/2014 3:33:47 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Naphthalene	180	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 3:33:47 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Phenol	31	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 3:33:47 PM	15440
Surr: 2-Fluorophenol	78.1	12.1-85.8		%REC	1	9/24/2014 3:33:47 PM	15440
Surr: Phenol-d5	51.0	17.7-65.8		%REC	1	9/24/2014 3:33:47 PM	15440
Surr: 2,4,6-Tribromophenol	93.0	26-138		%REC	1	9/24/2014 3:33:47 PM	15440
Surr: Nitrobenzene-d5	94.6	47.5-119		%REC	1	9/24/2014 3:33:47 PM	15440
Surr: 2-Fluorobiphenyl	102	48.1-106		%REC	1	9/24/2014 3:33:47 PM	15440
Surr: 4-Terphenyl-d14	108	44-113		%REC	1	9/24/2014 3:33:47 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-16
Collection Date: 9/17/2014 11:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
Benzene	17000	500		µg/L	500	9/26/2014 1:11:08 AM	R21469
Toluene	1400	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Ethylbenzene	1200	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Methyl tert-butyl ether (MTBE)	2100	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2,4-Trimethylbenzene	1100	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,3,5-Trimethylbenzene	360	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Naphthalene	260	100		µg/L	50	9/26/2014 1:40:48 AM	R21469
1-Methylnaphthalene	ND	200		µg/L	50	9/26/2014 1:40:48 AM	R21469
2-Methylnaphthalene	ND	200		µg/L	50	9/26/2014 1:40:48 AM	R21469
Acetone	ND	500		µg/L	50	9/26/2014 1:40:48 AM	R21469
Bromobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Bromodichloromethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Bromoform	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Bromomethane	ND	150		µg/L	50	9/26/2014 1:40:48 AM	R21469
2-Butanone	ND	500		µg/L	50	9/26/2014 1:40:48 AM	R21469
Carbon disulfide	ND	500		µg/L	50	9/26/2014 1:40:48 AM	R21469
Carbon Tetrachloride	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Chlorobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Chloroethane	ND	100		µg/L	50	9/26/2014 1:40:48 AM	R21469
Chloroform	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Chloromethane	ND	150		µg/L	50	9/26/2014 1:40:48 AM	R21469
2-Chlorotoluene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
4-Chlorotoluene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
cis-1,2-DCE	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/26/2014 1:40:48 AM	R21469
Dibromochloromethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Dibromomethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,3-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,4-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Dichlorodifluoromethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,1-Dichloroethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,1-Dichloroethene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2-Dichloropropane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,3-Dichloropropane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
2,2-Dichloropropane	ND	100		µg/L	50	9/26/2014 1:40:48 AM	R21469

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-007 **Matrix:** AQUEOUS

Client Sample ID: MKTF-16
Collection Date: 9/17/2014 11:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
1,1-Dichloropropene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Hexachlorobutadiene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
2-Hexanone	ND	500		µg/L	50	9/26/2014 1:40:48 AM	R21469
Isopropylbenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
4-Isopropyltoluene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
4-Methyl-2-pentanone	ND	500		µg/L	50	9/26/2014 1:40:48 AM	R21469
Methylene Chloride	ND	150		µg/L	50	9/26/2014 1:40:48 AM	R21469
n-Butylbenzene	ND	150		µg/L	50	9/26/2014 1:40:48 AM	R21469
n-Propylbenzene	120	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
sec-Butylbenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Styrene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
tert-Butylbenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/26/2014 1:40:48 AM	R21469
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
trans-1,2-DCE	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,1,1-Trichloroethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,1,2-Trichloroethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Trichloroethene (TCE)	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Trichlorofluoromethane	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
1,2,3-Trichloropropane	ND	100		µg/L	50	9/26/2014 1:40:48 AM	R21469
Vinyl chloride	ND	50		µg/L	50	9/26/2014 1:40:48 AM	R21469
Xylenes, Total	5300	75		µg/L	50	9/26/2014 1:40:48 AM	R21469
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%REC	50	9/26/2014 1:40:48 AM	R21469
Surr: 4-Bromofluorobenzene	101	70-130		%REC	50	9/26/2014 1:40:48 AM	R21469
Surr: Dibromofluoromethane	92.7	70-130		%REC	50	9/26/2014 1:40:48 AM	R21469
Surr: Toluene-d8	91.7	70-130		%REC	50	9/26/2014 1:40:48 AM	R21469

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Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-008 **Matrix:** AQUEOUS

Client Sample ID: MKTF-10
Collection Date: 9/18/2014 8:15:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	7.7	1.0		mg/L	1	9/23/2014 5:50:59 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 5:50:59 AM	15424
Surr: DNOP	109	59-141		%REC	1	9/23/2014 5:50:59 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	88	1.0		mg/L	20	9/24/2014 10:39:55 PM	R21431
Surr: BFB	101	70.9-130		%REC	20	9/24/2014 10:39:55 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	11	0.040	*	mg/L	20	9/24/2014 5:26:22 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:28:44 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:28:44 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:28:44 PM	R21433
Iron	33	2.0	*	mg/L	100	9/24/2014 5:35:02 PM	R21433
Manganese	14	0.040	*	mg/L	20	9/24/2014 5:26:22 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:28:44 PM	R21433
Zinc	ND	0.010		mg/L	1	9/24/2014 4:28:44 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	12	0.040	*	mg/L	20	9/25/2014 5:54:17 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:26:54 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 2:26:54 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 2:26:54 PM	15445
Iron	46	2.0	*	mg/L	100	9/25/2014 5:55:56 PM	15445
Manganese	15	0.040	*	mg/L	20	9/25/2014 5:54:17 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:26:54 PM	15445
Zinc	ND	0.010		mg/L	1	9/25/2014 2:26:54 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	10/2/2014 4:36:25 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 1:36:43 PM	R21559
Selenium	ND	0.0050		mg/L	5	10/2/2014 4:36:25 PM	R21629
Uranium	ND	0.0010		mg/L	1	9/30/2014 1:36:43 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	10/2/2014 3:02:40 PM	15445
Lead	0.0015	0.0010		mg/L	1	10/2/2014 1:46:32 PM	15445
Selenium	0.0032	0.0010		mg/L	1	10/2/2014 1:46:32 PM	15445
Uranium	0.0013	0.0010		mg/L	1	10/2/2014 1:46:32 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:52:02 PM	15530

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Hall Environmental Analysis Laboratory, Inc.

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Collection Date: 9/18/2014 8:15:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Aniline	73	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 4:03:05 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 4:03:05 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 4:03:05 PM	15440
2,4-Dimethylphenol	90	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 4:03:05 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 4:03:05 PM	15440

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: MKTF-10
Collection Date: 9/18/2014 8:15:00 AM
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
1-Methylnaphthalene	36	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2-Methylnaphthalene	42	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2-Methylphenol	320	100		µg/L	5	9/25/2014 2:00:54 PM	15440
3+4-Methylphenol	380	50		µg/L	5	9/25/2014 2:00:54 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Naphthalene	98	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 4:03:05 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Phenol	250	50		µg/L	5	9/25/2014 2:00:54 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 4:03:05 PM	15440
Surr: 2-Fluorophenol	47.6	12.1-85.8		%REC	1	9/24/2014 4:03:05 PM	15440
Surr: Phenol-d5	51.7	17.7-65.8		%REC	1	9/24/2014 4:03:05 PM	15440
Surr: 2,4,6-Tribromophenol	40.4	26-138		%REC	1	9/24/2014 4:03:05 PM	15440
Surr: Nitrobenzene-d5	94.5	47.5-119		%REC	1	9/24/2014 4:03:05 PM	15440
Surr: 2-Fluorobiphenyl	96.2	48.1-106		%REC	1	9/24/2014 4:03:05 PM	15440
Surr: 4-Terphenyl-d14	94.7	44-113		%REC	1	9/24/2014 4:03:05 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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Lab ID: 1409A33-008 **Matrix:** AQUEOUS

Client Sample ID: MKTF-10
Collection Date: 9/18/2014 8:15:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
Benzene	11000	500		µg/L	500	9/26/2014 2:40:01 AM	R21469
Toluene	15000	500		µg/L	500	9/26/2014 2:40:01 AM	R21469
Ethylbenzene	930	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2,4-Trimethylbenzene	500	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,3,5-Trimethylbenzene	110	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Naphthalene	130	100		µg/L	50	9/26/2014 3:09:39 AM	R21469
1-Methylnaphthalene	ND	200		µg/L	50	9/26/2014 3:09:39 AM	R21469
2-Methylnaphthalene	ND	200		µg/L	50	9/26/2014 3:09:39 AM	R21469
Acetone	ND	500		µg/L	50	9/26/2014 3:09:39 AM	R21469
Bromobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Bromodichloromethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Bromoform	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Bromomethane	ND	150		µg/L	50	9/26/2014 3:09:39 AM	R21469
2-Butanone	2800	500		µg/L	50	9/26/2014 3:09:39 AM	R21469
Carbon disulfide	ND	500		µg/L	50	9/26/2014 3:09:39 AM	R21469
Carbon Tetrachloride	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Chlorobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Chloroethane	ND	100		µg/L	50	9/26/2014 3:09:39 AM	R21469
Chloroform	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Chloromethane	ND	150		µg/L	50	9/26/2014 3:09:39 AM	R21469
2-Chlorotoluene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
4-Chlorotoluene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
cis-1,2-DCE	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/26/2014 3:09:39 AM	R21469
Dibromochloromethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Dibromomethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,3-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,4-Dichlorobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Dichlorodifluoromethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,1-Dichloroethane	57	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,1-Dichloroethene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2-Dichloropropane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,3-Dichloropropane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
2,2-Dichloropropane	ND	100		µg/L	50	9/26/2014 3:09:39 AM	R21469

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Hexachlorobutadiene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
2-Hexanone	ND	500		µg/L	50	9/26/2014 3:09:39 AM	R21469
Isopropylbenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
4-Isopropyltoluene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
4-Methyl-2-pentanone	ND	500		µg/L	50	9/26/2014 3:09:39 AM	R21469
Methylene Chloride	ND	150		µg/L	50	9/26/2014 3:09:39 AM	R21469
n-Butylbenzene	ND	150		µg/L	50	9/26/2014 3:09:39 AM	R21469
n-Propylbenzene	68	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
sec-Butylbenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Styrene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
tert-Butylbenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/26/2014 3:09:39 AM	R21469
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
trans-1,2-DCE	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,1,1-Trichloroethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,1,2-Trichloroethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Trichloroethene (TCE)	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Trichlorofluoromethane	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
1,2,3-Trichloropropane	ND	100		µg/L	50	9/26/2014 3:09:39 AM	R21469
Vinyl chloride	ND	50		µg/L	50	9/26/2014 3:09:39 AM	R21469
Xylenes, Total	4000	75		µg/L	50	9/26/2014 3:09:39 AM	R21469
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%REC	50	9/26/2014 3:09:39 AM	R21469
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	50	9/26/2014 3:09:39 AM	R21469
Surr: Dibromofluoromethane	84.2	70-130		%REC	50	9/26/2014 3:09:39 AM	R21469
Surr: Toluene-d8	92.8	70-130		%REC	50	9/26/2014 3:09:39 AM	R21469

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-009 **Matrix:** AQUEOUS

Client Sample ID: MKTF-9
Collection Date: 9/18/2014 9:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.4	1.0		mg/L	1	9/23/2014 6:20:30 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 6:20:30 AM	15424
Surr: DNOP	110	59-141		%REC	1	9/23/2014 6:20:30 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	5.6	1.0		mg/L	20	9/24/2014 11:08:34 PM	R21431
Surr: BFB	91.8	70.9-130		%REC	20	9/24/2014 11:08:34 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.32	0.0020		mg/L	1	9/24/2014 4:30:38 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:30:38 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:30:38 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:30:38 PM	R21433
Iron	2.2	0.10	*	mg/L	5	9/24/2014 5:37:03 PM	R21433
Manganese	2.6	0.010	*	mg/L	5	9/24/2014 5:37:03 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:30:38 PM	R21433
Zinc	ND	0.010		mg/L	1	9/24/2014 4:30:38 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.33	0.0020		mg/L	1	9/25/2014 2:53:14 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:53:14 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 2:53:14 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 2:53:14 PM	15445
Iron	2.4	0.10	*	mg/L	5	9/26/2014 12:12:53 PM	15445
Manganese	2.8	0.010	*	mg/L	5	9/25/2014 5:57:57 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:53:14 PM	15445
Zinc	ND	0.010		mg/L	1	9/25/2014 2:53:14 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	10/2/2014 4:45:44 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 1:39:50 PM	R21559
Selenium	ND	0.010		mg/L	10	10/2/2014 4:45:44 PM	R21629
Uranium	0.012	0.0010		mg/L	1	9/30/2014 1:39:50 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	10/2/2014 3:05:46 PM	15445
Lead	ND	0.0010		mg/L	1	10/2/2014 1:49:38 PM	15445
Selenium	ND	0.0050		mg/L	5	10/2/2014 3:05:46 PM	15445
Uranium	0.012	0.0010		mg/L	1	10/2/2014 1:49:38 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:53:48 PM	15530

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 Annual GW
Collection Date: 9/18/2014 9:00:00 AM
Lab ID: 1409A33-009
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Aniline	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440
2,4-Dimethylphenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-009 **Matrix:** AQUEOUS

Client Sample ID: MKTF-9
Collection Date: 9/18/2014 9:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
1-Methylnaphthalene	31	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2-Methylnaphthalene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2-Methylphenol	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440
3+4-Methylphenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Naphthalene	18	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 4:32:22 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Phenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 4:32:22 PM	15440
Surr: 2-Fluorophenol	68.3	12.1-85.8		%REC	1	9/24/2014 4:32:22 PM	15440
Surr: Phenol-d5	62.8	17.7-65.8		%REC	1	9/24/2014 4:32:22 PM	15440
Surr: 2,4,6-Tribromophenol	65.1	26-138		%REC	1	9/24/2014 4:32:22 PM	15440
Surr: Nitrobenzene-d5	89.3	47.5-119		%REC	1	9/24/2014 4:32:22 PM	15440
Surr: 2-Fluorobiphenyl	85.3	48.1-106		%REC	1	9/24/2014 4:32:22 PM	15440
Surr: 4-Terphenyl-d14	96.7	44-113		%REC	1	9/24/2014 4:32:22 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: KJH	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2014 Annual GW
Collection Date: 9/18/2014 9:00:00 AM
Lab ID: 1409A33-009
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	750	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Toluene	27	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Ethylbenzene	96	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Methyl tert-butyl ether (MTBE)	760	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2,4-Trimethylbenzene	38	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,3,5-Trimethylbenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Naphthalene	30	20		µg/L	10	9/26/2014 4:38:34 AM	R21469
1-Methylnaphthalene	42	40		µg/L	10	9/26/2014 4:38:34 AM	R21469
2-Methylnaphthalene	ND	40		µg/L	10	9/26/2014 4:38:34 AM	R21469
Acetone	ND	100		µg/L	10	9/26/2014 4:38:34 AM	R21469
Bromobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Bromodichloromethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Bromoform	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Bromomethane	ND	30		µg/L	10	9/26/2014 4:38:34 AM	R21469
2-Butanone	ND	100		µg/L	10	9/26/2014 4:38:34 AM	R21469
Carbon disulfide	ND	100		µg/L	10	9/26/2014 4:38:34 AM	R21469
Carbon Tetrachloride	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Chlorobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Chloroethane	ND	20		µg/L	10	9/26/2014 4:38:34 AM	R21469
Chloroform	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Chloromethane	ND	30		µg/L	10	9/26/2014 4:38:34 AM	R21469
2-Chlorotoluene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
4-Chlorotoluene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
cis-1,2-DCE	21	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
cis-1,3-Dichloropropene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	9/26/2014 4:38:34 AM	R21469
Dibromochloromethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Dibromomethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2-Dichlorobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,3-Dichlorobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,4-Dichlorobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Dichlorodifluoromethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,1-Dichloroethane	28	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,1-Dichloroethene	65	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2-Dichloropropane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,3-Dichloropropane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
2,2-Dichloropropane	ND	20		µg/L	10	9/26/2014 4:38:34 AM	R21469

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-009 **Matrix:** AQUEOUS

Client Sample ID: MKTF-9
Collection Date: 9/18/2014 9:00:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,1-Dichloropropene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Hexachlorobutadiene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
2-Hexanone	ND	100		µg/L	10	9/26/2014 4:38:34 AM	R21469
Isopropylbenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
4-Isopropyltoluene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
4-Methyl-2-pentanone	ND	100		µg/L	10	9/26/2014 4:38:34 AM	R21469
Methylene Chloride	ND	30		µg/L	10	9/26/2014 4:38:34 AM	R21469
n-Butylbenzene	ND	30		µg/L	10	9/26/2014 4:38:34 AM	R21469
n-Propylbenzene	14	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
sec-Butylbenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Styrene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
tert-Butylbenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	9/26/2014 4:38:34 AM	R21469
Tetrachloroethene (PCE)	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
trans-1,2-DCE	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
trans-1,3-Dichloropropene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2,3-Trichlorobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2,4-Trichlorobenzene	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,1,1-Trichloroethane	110	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,1,2-Trichloroethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Trichloroethene (TCE)	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Trichlorofluoromethane	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
1,2,3-Trichloropropane	ND	20		µg/L	10	9/26/2014 4:38:34 AM	R21469
Vinyl chloride	ND	10		µg/L	10	9/26/2014 4:38:34 AM	R21469
Xylenes, Total	43	15		µg/L	10	9/26/2014 4:38:34 AM	R21469
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%REC	10	9/26/2014 4:38:34 AM	R21469
Surr: 4-Bromofluorobenzene	103	70-130		%REC	10	9/26/2014 4:38:34 AM	R21469
Surr: Dibromofluoromethane	88.5	70-130		%REC	10	9/26/2014 4:38:34 AM	R21469
Surr: Toluene-d8	94.6	70-130		%REC	10	9/26/2014 4:38:34 AM	R21469

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2014 Annual GW
Collection Date: 9/18/2014 9:30:00 AM
Lab ID: 1409A33-010
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.7	1.0		mg/L	1	9/23/2014 6:49:55 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 6:49:55 AM	15424
Surr: DNOP	99.8	59-141		%REC	1	9/23/2014 6:49:55 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	6.8	0.050		mg/L	1	9/24/2014 11:37:13 PM	R21431
Surr: BFB	326	70.9-130	S	%REC	1	9/24/2014 11:37:13 PM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.15	0.0020		mg/L	1	9/24/2014 4:32:25 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:32:25 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:32:25 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:32:25 PM	R21433
Iron	0.029	0.020		mg/L	1	9/24/2014 4:32:25 PM	R21433
Manganese	0.59	0.0020	*	mg/L	1	9/24/2014 4:32:25 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:32:25 PM	R21433
Zinc	0.041	0.010		mg/L	1	9/24/2014 4:32:25 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.15	0.0020		mg/L	1	9/25/2014 2:58:46 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 2:58:46 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 2:58:46 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 2:58:46 PM	15445
Iron	0.15	0.020		mg/L	1	9/25/2014 2:58:46 PM	15445
Manganese	0.57	0.0020	*	mg/L	1	9/25/2014 2:58:46 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 2:58:46 PM	15445
Zinc	ND	0.010		mg/L	1	9/25/2014 2:58:46 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	10/2/2014 4:48:49 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 1:55:23 PM	R21559
Selenium	ND	0.0050		mg/L	5	10/2/2014 4:48:49 PM	R21629
Uranium	0.012	0.0010		mg/L	1	9/30/2014 1:55:23 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0017	0.0010		mg/L	1	10/2/2014 1:52:44 PM	15445
Lead	ND	0.0010		mg/L	1	10/2/2014 1:52:44 PM	15445
Selenium	0.0031	0.0010		mg/L	1	10/2/2014 1:52:44 PM	15445
Uranium	0.013	0.0010		mg/L	1	10/2/2014 1:52:44 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 2:55:34 PM	15530

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-010 **Matrix:** AQUEOUS

Client Sample ID: MKTF-2
Collection Date: 9/18/2014 9:30:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JDC
Acenaphthene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Aniline	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440
2,4-Dimethylphenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-010 **Matrix:** AQUEOUS

Client Sample ID: MKTF-2
Collection Date: 9/18/2014 9:30:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
1-Methylnaphthalene	23	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2-Methylnaphthalene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2-Methylphenol	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440
3+4-Methylphenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Naphthalene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 5:01:33 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Phenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 5:01:33 PM	15440
Surr: 2-Fluorophenol	62.3	12.1-85.8		%REC	1	9/24/2014 5:01:33 PM	15440
Surr: Phenol-d5	58.7	17.7-65.8		%REC	1	9/24/2014 5:01:33 PM	15440
Surr: 2,4,6-Tribromophenol	75.4	26-138		%REC	1	9/24/2014 5:01:33 PM	15440
Surr: Nitrobenzene-d5	72.0	47.5-119		%REC	1	9/24/2014 5:01:33 PM	15440
Surr: 2-Fluorobiphenyl	80.2	48.1-106		%REC	1	9/24/2014 5:01:33 PM	15440
Surr: 4-Terphenyl-d14	90.9	44-113		%REC	1	9/24/2014 5:01:33 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-010 **Matrix:** AQUEOUS

Client Sample ID: MKTF-2
Collection Date: 9/18/2014 9:30:00 AM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
Benzene	2100	50		µg/L	50	9/29/2014 12:42:53 PM	R21507
Toluene	44	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Ethylbenzene	340	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Methyl tert-butyl ether (MTBE)	100	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2,4-Trimethylbenzene	140	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2-Dichloroethane (EDC)	5.1	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Naphthalene	17	10		µg/L	5	9/26/2014 8:31:58 PM	R21508
1-Methylnaphthalene	37	20		µg/L	5	9/26/2014 8:31:58 PM	R21508
2-Methylnaphthalene	ND	20		µg/L	5	9/26/2014 8:31:58 PM	R21508
Acetone	ND	50		µg/L	5	9/26/2014 8:31:58 PM	R21508
Bromobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Bromodichloromethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Bromoform	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Bromomethane	ND	15		µg/L	5	9/26/2014 8:31:58 PM	R21508
2-Butanone	ND	50		µg/L	5	9/26/2014 8:31:58 PM	R21508
Carbon disulfide	ND	50		µg/L	5	9/26/2014 8:31:58 PM	R21508
Carbon Tetrachloride	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Chlorobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Chloroethane	ND	10		µg/L	5	9/26/2014 8:31:58 PM	R21508
Chloroform	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Chloromethane	ND	15		µg/L	5	9/26/2014 8:31:58 PM	R21508
2-Chlorotoluene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
4-Chlorotoluene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
cis-1,2-DCE	30	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	9/26/2014 8:31:58 PM	R21508
Dibromochloromethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Dibromomethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2-Dichlorobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,3-Dichlorobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,4-Dichlorobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Dichlorodifluoromethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,1-Dichloroethane	98	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,1-Dichloroethene	24	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2-Dichloropropane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,3-Dichloropropane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
2,2-Dichloropropane	ND	10		µg/L	5	9/26/2014 8:31:58 PM	R21508

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2014 Annual GW
Collection Date: 9/18/2014 9:30:00 AM
Lab ID: 1409A33-010
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
1,1-Dichloropropene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Hexachlorobutadiene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
2-Hexanone	ND	50		µg/L	5	9/26/2014 8:31:58 PM	R21508
Isopropylbenzene	30	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
4-Isopropyltoluene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
4-Methyl-2-pentanone	ND	50		µg/L	5	9/26/2014 8:31:58 PM	R21508
Methylene Chloride	ND	15		µg/L	5	9/26/2014 8:31:58 PM	R21508
n-Butylbenzene	ND	15		µg/L	5	9/26/2014 8:31:58 PM	R21508
n-Propylbenzene	130	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
sec-Butylbenzene	6.8	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Styrene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
tert-Butylbenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	9/26/2014 8:31:58 PM	R21508
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
trans-1,2-DCE	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,1,1-Trichloroethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,1,2-Trichloroethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Trichloroethene (TCE)	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Trichlorofluoromethane	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
1,2,3-Trichloropropane	ND	10		µg/L	5	9/26/2014 8:31:58 PM	R21508
Vinyl chloride	ND	5.0		µg/L	5	9/26/2014 8:31:58 PM	R21508
Xylenes, Total	ND	7.5		µg/L	5	9/26/2014 8:31:58 PM	R21508
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	5	9/26/2014 8:31:58 PM	R21508
Surr: 4-Bromofluorobenzene	110	70-130		%REC	5	9/26/2014 8:31:58 PM	R21508
Surr: Dibromofluoromethane	87.1	70-130		%REC	5	9/26/2014 8:31:58 PM	R21508
Surr: Toluene-d8	93.3	70-130		%REC	5	9/26/2014 8:31:58 PM	R21508

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-011 **Matrix:** AQUEOUS

Client Sample ID: MKTF-18
Collection Date: 9/18/2014 2:40:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	3.1	1.0		mg/L	1	9/23/2014 7:19:42 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 7:19:42 AM	15424
Surr: DNOP	111	59-141		%REC	1	9/23/2014 7:19:42 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.4	0.50		mg/L	10	9/25/2014 12:34:18 AM	R21431
Surr: BFB	93.8	70.9-130		%REC	10	9/25/2014 12:34:18 AM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.3	0.010	*	mg/L	5	9/24/2014 5:38:55 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:43:23 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:43:23 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:43:23 PM	R21433
Iron	0.30	0.020		mg/L	1	9/24/2014 4:43:23 PM	R21433
Manganese	1.7	0.010	*	mg/L	5	9/24/2014 5:38:55 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:43:23 PM	R21433
Zinc	0.012	0.010		mg/L	1	9/24/2014 4:43:23 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.6	0.010	*	mg/L	5	9/25/2014 6:05:22 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 3:00:50 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 3:00:50 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 3:00:50 PM	15445
Iron	3.2	0.10	*	mg/L	5	9/25/2014 6:05:22 PM	15445
Manganese	2.0	0.010	*	mg/L	5	9/25/2014 6:05:22 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 3:00:50 PM	15445
Zinc	0.018	0.010		mg/L	1	9/25/2014 3:00:50 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	10/2/2014 4:51:54 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 1:58:30 PM	R21559
Selenium	ND	0.0050		mg/L	5	10/2/2014 4:51:54 PM	R21629
Uranium	0.0012	0.0010		mg/L	1	9/30/2014 1:58:30 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0015	0.0010		mg/L	1	10/2/2014 1:55:50 PM	15445
Lead	0.0028	0.0010		mg/L	1	10/2/2014 1:55:50 PM	15445
Selenium	0.0025	0.0010		mg/L	1	10/2/2014 1:55:50 PM	15445
Uranium	0.0015	0.0010		mg/L	1	10/2/2014 1:55:50 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 3:01:04 PM	15530

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-011 **Matrix:** AQUEOUS

Client Sample ID: MKTF-18
Collection Date: 9/18/2014 2:40:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Aniline	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440
2,4-Dimethylphenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-011 **Matrix:** AQUEOUS

Client Sample ID: MKTF-18
Collection Date: 9/18/2014 2:40:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
1-Methylnaphthalene	120	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2-Methylnaphthalene	23	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2-Methylphenol	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440
3+4-Methylphenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Naphthalene	59	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 5:30:47 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Phenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 5:30:47 PM	15440
Surr: 2-Fluorophenol	81.7	12.1-85.8		%REC	1	9/24/2014 5:30:47 PM	15440
Surr: Phenol-d5	70.8	17.7-65.8	S	%REC	1	9/24/2014 5:30:47 PM	15440
Surr: 2,4,6-Tribromophenol	83.6	26-138		%REC	1	9/24/2014 5:30:47 PM	15440
Surr: Nitrobenzene-d5	92.0	47.5-119		%REC	1	9/24/2014 5:30:47 PM	15440
Surr: 2-Fluorobiphenyl	93.2	48.1-106		%REC	1	9/24/2014 5:30:47 PM	15440
Surr: 4-Terphenyl-d14	99.4	44-113		%REC	1	9/24/2014 5:30:47 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-011 **Matrix:** AQUEOUS

Client Sample ID: MKTF-18
Collection Date: 9/18/2014 2:40:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
Benzene	120	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Toluene	13	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Ethylbenzene	69	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Methyl tert-butyl ether (MTBE)	120	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2,4-Trimethylbenzene	95	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,3,5-Trimethylbenzene	25	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Naphthalene	97	10		µg/L	5	9/29/2014 1:12:25 PM	R21507
1-Methylnaphthalene	150	20		µg/L	5	9/29/2014 1:12:25 PM	R21507
2-Methylnaphthalene	33	20		µg/L	5	9/29/2014 1:12:25 PM	R21507
Acetone	ND	50		µg/L	5	9/29/2014 1:12:25 PM	R21507
Bromobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Bromodichloromethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Bromoform	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Bromomethane	ND	15		µg/L	5	9/29/2014 1:12:25 PM	R21507
2-Butanone	ND	50		µg/L	5	9/29/2014 1:12:25 PM	R21507
Carbon disulfide	ND	50		µg/L	5	9/29/2014 1:12:25 PM	R21507
Carbon Tetrachloride	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Chlorobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Chloroethane	ND	10		µg/L	5	9/29/2014 1:12:25 PM	R21507
Chloroform	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Chloromethane	ND	15		µg/L	5	9/29/2014 1:12:25 PM	R21507
2-Chlorotoluene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
4-Chlorotoluene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
cis-1,2-DCE	7.3	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	9/29/2014 1:12:25 PM	R21507
Dibromochloromethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Dibromomethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2-Dichlorobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,3-Dichlorobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,4-Dichlorobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Dichlorodifluoromethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,1-Dichloroethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,1-Dichloroethene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2-Dichloropropane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,3-Dichloropropane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
2,2-Dichloropropane	ND	10		µg/L	5	9/29/2014 1:12:25 PM	R21507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-011
Matrix: AQUEOUS
Client Sample ID: MKTF-18
Collection Date: 9/18/2014 2:40:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
1,1-Dichloropropene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Hexachlorobutadiene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
2-Hexanone	ND	50		µg/L	5	9/29/2014 1:12:25 PM	R21507
Isopropylbenzene	7.8	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
4-Isopropyltoluene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
4-Methyl-2-pentanone	ND	50		µg/L	5	9/29/2014 1:12:25 PM	R21507
Methylene Chloride	ND	15		µg/L	5	9/29/2014 1:12:25 PM	R21507
n-Butylbenzene	ND	15		µg/L	5	9/29/2014 1:12:25 PM	R21507
n-Propylbenzene	11	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
sec-Butylbenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Styrene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
tert-Butylbenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	9/29/2014 1:12:25 PM	R21507
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
trans-1,2-DCE	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,1,1-Trichloroethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,1,2-Trichloroethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Trichloroethene (TCE)	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Trichlorofluoromethane	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
1,2,3-Trichloropropane	ND	10		µg/L	5	9/29/2014 1:12:25 PM	R21507
Vinyl chloride	ND	5.0		µg/L	5	9/29/2014 1:12:25 PM	R21507
Xylenes, Total	42	7.5		µg/L	5	9/29/2014 1:12:25 PM	R21507
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	5	9/29/2014 1:12:25 PM	R21507
Surr: 4-Bromofluorobenzene	104	70-130		%REC	5	9/29/2014 1:12:25 PM	R21507
Surr: Dibromofluoromethane	95.0	70-130		%REC	5	9/29/2014 1:12:25 PM	R21507
Surr: Toluene-d8	96.6	70-130		%REC	5	9/29/2014 1:12:25 PM	R21507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-012 **Matrix:** AQUEOUS

Client Sample ID: MKTF-17
Collection Date: 9/18/2014 3:20:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.5	1.0		mg/L	1	9/23/2014 7:49:09 AM	15424
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/23/2014 7:49:09 AM	15424
Surr: DNOP	109	59-141		%REC	1	9/23/2014 7:49:09 AM	15424
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	3.3	1.0		mg/L	20	9/25/2014 1:02:55 AM	R21431
Surr: BFB	99.4	70.9-130		%REC	20	9/25/2014 1:02:55 AM	R21431
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.16	0.0020		mg/L	1	9/24/2014 4:45:23 PM	R21433
Cadmium	ND	0.0020		mg/L	1	9/24/2014 4:45:23 PM	R21433
Chromium	ND	0.0060		mg/L	1	9/24/2014 4:45:23 PM	R21433
Copper	ND	0.0060		mg/L	1	9/24/2014 4:45:23 PM	R21433
Iron	0.27	0.020		mg/L	1	9/24/2014 4:45:23 PM	R21433
Manganese	3.1	0.010	*	mg/L	5	9/24/2014 5:40:42 PM	R21433
Silver	ND	0.0050		mg/L	1	9/24/2014 4:45:23 PM	R21433
Zinc	0.018	0.010		mg/L	1	9/24/2014 4:45:23 PM	R21433
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.21	0.0020		mg/L	1	9/25/2014 3:02:32 PM	15445
Cadmium	ND	0.0020		mg/L	1	9/25/2014 3:02:32 PM	15445
Chromium	ND	0.0060		mg/L	1	9/25/2014 3:02:32 PM	15445
Copper	ND	0.0060		mg/L	1	9/25/2014 3:02:32 PM	15445
Iron	1.8	0.10	*	mg/L	5	9/25/2014 6:07:13 PM	15445
Manganese	3.3	0.010	*	mg/L	5	9/25/2014 6:07:13 PM	15445
Silver	ND	0.0050		mg/L	1	9/25/2014 3:02:32 PM	15445
Zinc	0.013	0.010		mg/L	1	9/25/2014 3:02:32 PM	15445
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0053	0.0050		mg/L	5	10/2/2014 4:55:00 PM	R21629
Lead	ND	0.0010		mg/L	1	9/30/2014 2:01:36 PM	R21559
Selenium	ND	0.0050		mg/L	5	10/2/2014 4:55:00 PM	R21629
Uranium	0.022	0.0010		mg/L	1	9/30/2014 2:01:36 PM	R21559
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0055	0.0010		mg/L	1	10/2/2014 1:58:56 PM	15445
Lead	0.0016	0.0010		mg/L	1	10/2/2014 1:58:56 PM	15445
Selenium	0.0019	0.0010		mg/L	1	10/2/2014 1:58:56 PM	15445
Uranium	0.022	0.0010		mg/L	1	10/2/2014 1:58:56 PM	15445
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	9/26/2014 3:02:50 PM	15530

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-012
Matrix: AQUEOUS
Client Sample ID: MKTF-17
Collection Date: 9/18/2014 3:20:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Acenaphthylene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Aniline	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Anthracene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Azobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Benz(a)anthracene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Benzo(a)pyrene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Benzo(b)fluoranthene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Benzo(k)fluoranthene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Benzoic acid	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440
Benzyl alcohol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Butyl benzyl phthalate	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Carbazole	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4-Chloroaniline	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2-Chloronaphthalene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2-Chlorophenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Chrysene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Di-n-butyl phthalate	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Di-n-octyl phthalate	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Dibenzofuran	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
1,2-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
1,3-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
1,4-Dichlorobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
3,3'-Dichlorobenzidine	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Diethyl phthalate	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Dimethyl phthalate	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2,4-Dichlorophenol	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440
2,4-Dimethylphenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440
2,4-Dinitrophenol	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 Annual GW
Collection Date: 9/18/2014 3:20:00 PM
Lab ID: 1409A33-012
Matrix: AQUEOUS
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2,6-Dinitrotoluene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Fluoranthene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Fluorene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Hexachlorobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Hexachlorobutadiene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Hexachloroethane	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Isophorone	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
1-Methylnaphthalene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2-Methylnaphthalene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2-Methylphenol	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440
3+4-Methylphenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
N-Nitrosodimethylamine	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Naphthalene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
3-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4-Nitroaniline	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Nitrobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2-Nitrophenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
4-Nitrophenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Pentachlorophenol	ND	20		µg/L	1	9/24/2014 5:59:54 PM	15440
Phenanthrene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Phenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Pyrene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Pyridine	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/24/2014 5:59:54 PM	15440
Surr: 2-Fluorophenol	82.2	12.1-85.8		%REC	1	9/24/2014 5:59:54 PM	15440
Surr: Phenol-d5	70.8	17.7-65.8	S	%REC	1	9/24/2014 5:59:54 PM	15440
Surr: 2,4,6-Tribromophenol	79.4	26-138		%REC	1	9/24/2014 5:59:54 PM	15440
Surr: Nitrobenzene-d5	87.7	47.5-119		%REC	1	9/24/2014 5:59:54 PM	15440
Surr: 2-Fluorobiphenyl	93.9	48.1-106		%REC	1	9/24/2014 5:59:54 PM	15440
Surr: 4-Terphenyl-d14	96.8	44-113		%REC	1	9/24/2014 5:59:54 PM	15440
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-012 **Matrix:** AQUEOUS

Client Sample ID: MKTF-17
Collection Date: 9/18/2014 3:20:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
1,1-Dichloropropene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Hexachlorobutadiene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
2-Hexanone	ND	100		µg/L	10	9/27/2014 12:29:01 AM	R21508
Isopropylbenzene	29	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
4-Isopropyltoluene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
4-Methyl-2-pentanone	ND	100		µg/L	10	9/27/2014 12:29:01 AM	R21508
Methylene Chloride	ND	30		µg/L	10	9/27/2014 12:29:01 AM	R21508
n-Butylbenzene	ND	30		µg/L	10	9/27/2014 12:29:01 AM	R21508
n-Propylbenzene	66	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
sec-Butylbenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Styrene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
tert-Butylbenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	9/27/2014 12:29:01 AM	R21508
Tetrachloroethene (PCE)	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
trans-1,2-DCE	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
trans-1,3-Dichloropropene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2,3-Trichlorobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2,4-Trichlorobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,1,1-Trichloroethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,1,2-Trichloroethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Trichloroethene (TCE)	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Trichlorofluoromethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2,3-Trichloropropane	ND	20		µg/L	10	9/27/2014 12:29:01 AM	R21508
Vinyl chloride	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Xylenes, Total	ND	15		µg/L	10	9/27/2014 12:29:01 AM	R21508
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%REC	10	9/27/2014 12:29:01 AM	R21508
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	10	9/27/2014 12:29:01 AM	R21508
Surr: Dibromofluoromethane	86.2	70-130		%REC	10	9/27/2014 12:29:01 AM	R21508
Surr: Toluene-d8	94.8	70-130		%REC	10	9/27/2014 12:29:01 AM	R21508

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: 2014 Annual GW
Lab ID: 1409A33-012 **Matrix:** AQUEOUS

Client Sample ID: MKTF-17
Collection Date: 9/18/2014 3:20:00 PM
Received Date: 9/19/2014 12:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	KJH
Benzene	550	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Toluene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Ethylbenzene	240	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Methyl tert-butyl ether (MTBE)	690	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2,4-Trimethylbenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,3,5-Trimethylbenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Naphthalene	ND	20		µg/L	10	9/27/2014 12:29:01 AM	R21508
1-Methylnaphthalene	ND	40		µg/L	10	9/27/2014 12:29:01 AM	R21508
2-Methylnaphthalene	ND	40		µg/L	10	9/27/2014 12:29:01 AM	R21508
Acetone	ND	100		µg/L	10	9/27/2014 12:29:01 AM	R21508
Bromobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Bromodichloromethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Bromoform	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Bromomethane	ND	30		µg/L	10	9/27/2014 12:29:01 AM	R21508
2-Butanone	ND	100		µg/L	10	9/27/2014 12:29:01 AM	R21508
Carbon disulfide	ND	100		µg/L	10	9/27/2014 12:29:01 AM	R21508
Carbon Tetrachloride	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Chlorobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Chloroethane	ND	20		µg/L	10	9/27/2014 12:29:01 AM	R21508
Chloroform	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Chloromethane	ND	30		µg/L	10	9/27/2014 12:29:01 AM	R21508
2-Chlorotoluene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
4-Chlorotoluene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
cis-1,2-DCE	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
cis-1,3-Dichloropropene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	9/27/2014 12:29:01 AM	R21508
Dibromochloromethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Dibromomethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2-Dichlorobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,3-Dichlorobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,4-Dichlorobenzene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
Dichlorodifluoromethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,1-Dichloroethane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,1-Dichloroethene	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,2-Dichloropropane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
1,3-Dichloropropane	ND	10		µg/L	10	9/27/2014 12:29:01 AM	R21508
2,2-Dichloropropane	ND	20		µg/L	10	9/27/2014 12:29:01 AM	R21508

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409A33

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **PBW** Batch ID: **R21433** RunNo: **21433**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626248** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **LCSW** Batch ID: **R21433** RunNo: **21433**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626249** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	93.3	85	115			
Cadmium	0.47	0.0020	0.5000	0	93.8	85	115			
Chromium	0.46	0.0060	0.5000	0	91.5	85	115			
Copper	0.46	0.0060	0.5000	0	92.7	85	115			
Iron	0.48	0.020	0.5000	0	96.4	85	115			
Manganese	0.47	0.0020	0.5000	0	93.8	85	115			
Silver	0.097	0.0050	0.1000	0	97.0	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **PBW** Batch ID: **R21433** RunNo: **21433**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626252** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**

Client ID: **LCSW** Batch ID: **R21433** RunNo: **21433**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626253** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.6	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.5	85	115			
Chromium	0.48	0.0060	0.5000	0	95.3	85	115			
Copper	0.48	0.0060	0.5000	0	96.9	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	98.4	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Zinc	0.49	0.010	0.5000	0	98.6	85	115			

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#: 1409A33

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **MB-15445** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **PBW** Batch ID: **15445** RunNo: **21391**

Prep Date: **9/23/2014** Analysis Date: **9/23/2014** SeqNo: **624989** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-15445** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **LCSW** Batch ID: **15445** RunNo: **21391**

Prep Date: **9/23/2014** Analysis Date: **9/23/2014** SeqNo: **624990** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.4	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.0	85	115			
Chromium	0.49	0.0060	0.5000	0	97.7	85	115			
Copper	0.49	0.0060	0.5000	0	98.3	85	115			
Iron	0.49	0.020	0.5000	0	97.3	85	115			
Manganese	0.50	0.0020	0.5000	0	99.8	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Zinc	0.50	0.010	0.5000	0	101	85	115			

Sample ID **1409A33-009EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **MKTF-9** Batch ID: **15445** RunNo: **21450**

Prep Date: **9/23/2014** Analysis Date: **9/25/2014** SeqNo: **627829** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.84	0.0020	0.5000	0.3299	102	70	130			
Cadmium	0.50	0.0020	0.5000	0	101	70	130			
Chromium	0.49	0.0060	0.5000	0	98.6	70	130			
Copper	0.52	0.0060	0.5000	0	104	70	130			
Silver	0.11	0.0050	0.1000	0	109	70	130			
Zinc	0.51	0.010	0.5000	0.004600	100	70	130			

Sample ID **1409A33-009EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **MKTF-9** Batch ID: **15445** RunNo: **21450**

Prep Date: **9/23/2014** Analysis Date: **9/25/2014** SeqNo: **627830** Units: **mg/L**

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **1409A33-009EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**

Client ID: **MKTF-9** Batch ID: **15445** RunNo: **21450**

Prep Date: **9/23/2014** Analysis Date: **9/25/2014** SeqNo: **627830** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.83	0.0020	0.5000	0.3299	100	70	130	0.975	20	
Cadmium	0.50	0.0020	0.5000	0	100	70	130	0.335	20	
Chromium	0.49	0.0060	0.5000	0	98.3	70	130	0.297	20	
Copper	0.52	0.0060	0.5000	0	104	70	130	0.587	20	
Silver	0.11	0.0050	0.1000	0	108	70	130	1.08	20	
Zinc	0.50	0.010	0.5000	0.004600	100	70	130	0.287	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.
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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**

Client ID: **LCSW** Batch ID: **R21559** RunNo: **21559**

Prep Date: Analysis Date: **9/30/2014** SeqNo: **631540** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.023	0.0010	0.02500	0	92.9	85	115			
Uranium	0.024	0.0010	0.02500	0	94.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**

Client ID: **PBW** Batch ID: **R21559** RunNo: **21559**

Prep Date: Analysis Date: **9/30/2014** SeqNo: **631542** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**

Client ID: **LCSW** Batch ID: **R21559** RunNo: **21559**

Prep Date: Analysis Date: **9/30/2014** SeqNo: **631545** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.023	0.0010	0.02500	0	90.3	85	115			
Uranium	0.023	0.0010	0.02500	0	92.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**

Client ID: **PBW** Batch ID: **R21559** RunNo: **21559**

Prep Date: Analysis Date: **9/30/2014** SeqNo: **631546** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**

Client ID: **LCSW** Batch ID: **R21629** RunNo: **21629**

Prep Date: Analysis Date: **10/2/2014** SeqNo: **634388** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	91.7	85	115			
Lead	0.024	0.0010	0.02500	0	94.8	85	115			
Selenium	0.022	0.0010	0.02500	0	89.3	85	115			
Uranium	0.024	0.0010	0.02500	0	94.5	85	115			

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 Annual GW

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R21629** RunNo: **21629**
Prep Date: Analysis Date: **10/2/2014** SeqNo: **634389** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.9	85	115			
Lead	0.024	0.0010	0.02500	0	95.2	85	115			
Selenium	0.023	0.0010	0.02500	0	92.8	85	115			
Uranium	0.024	0.0010	0.02500	0	96.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R21629** RunNo: **21629**
Prep Date: Analysis Date: **10/2/2014** SeqNo: **634390** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R21629** RunNo: **21629**
Prep Date: Analysis Date: **10/2/2014** SeqNo: **634391** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **LLLCS-15445** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **BatchQC** Batch ID: **15445** RunNo: **21619**

Prep Date: **9/23/2014** Analysis Date: **10/2/2014** SeqNo: **634155** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.027	0.0010	0.02500	0	107	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			
Uranium	0.027	0.0010	0.02500	0	106	85	115			

Sample ID **MB-15445** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **PBW** Batch ID: **15445** RunNo: **21619**

Prep Date: **9/23/2014** Analysis Date: **10/2/2014** SeqNo: **634158** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID	MB-15530	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury						
Client ID:	PBW	Batch ID:	15530	RunNo:	21492						
Prep Date:	9/26/2014	Analysis Date:	9/26/2014	SeqNo:	628415	Units:	mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.00020								

Sample ID	LCS-15530	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury						
Client ID:	LCSW	Batch ID:	15530	RunNo:	21492						
Prep Date:	9/26/2014	Analysis Date:	9/26/2014	SeqNo:	628416	Units:	mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0053	0.00020	0.005000	0	105	80	120			

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#: 1409A33

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **MB-15424** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **PBW** Batch ID: **15424** RunNo: **21369**

Prep Date: **9/22/2014** Analysis Date: **9/23/2014** SeqNo: **624234** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		93.9	59	141			

Sample ID **LCS-15424** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **LCSW** Batch ID: **15424** RunNo: **21369**

Prep Date: **9/22/2014** Analysis Date: **9/23/2014** SeqNo: **624235** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.5	1.0	5.000	0	130	69.7	142			
Surr: DNOP	0.55		0.5000		110	59	141			

Sample ID **1409A33-004CMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **MKTF-04** Batch ID: **15424** RunNo: **21369**

Prep Date: **9/22/2014** Analysis Date: **9/23/2014** SeqNo: **624237** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	8.0	1.0	5.000	1.497	131	55	159			
Surr: DNOP	0.51		0.5000		102	59	141			

Sample ID **1409A33-004CMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range**

Client ID: **MKTF-04** Batch ID: **15424** RunNo: **21369**

Prep Date: **9/22/2014** Analysis Date: **9/23/2014** SeqNo: **624238** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	7.9	1.0	5.000	1.497	127	55	159	2.17	20	
Surr: DNOP	0.51		0.5000		101	59	141	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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBW** Batch ID: **R21431** RunNo: **21431**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626176** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.2	70.9	130			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSW** Batch ID: **R21431** RunNo: **21431**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626182** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.52	0.050	0.5000	0	104	80	120			
Surr: BFB	19		20.00		95.6	70.9	130			

Sample ID **1409A33-004BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **MKTF-04** Batch ID: **R21431** RunNo: **21431**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626511** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	8.5	0.50	5.000	3.410	102	70.4	127			
Surr: BFB	210		200.0		104	70.9	130			

Sample ID **1409A33-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **MKTF-04** Batch ID: **R21431** RunNo: **21431**

Prep Date: Analysis Date: **9/24/2014** SeqNo: **626512** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	8.4	0.50	5.000	3.410	100	70.4	127	0.756	20	
Surr: BFB	210		200.0		105	70.9	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R21469**	RunNo: **21469**	
Prep Date:	Analysis Date: **9/25/2014**	SeqNo: **627686**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 Annual GW

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21469** RunNo: **21469**
Prep Date: Analysis Date: **9/25/2014** SeqNo: **627686** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.4	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.1	70	130			
Surr: Toluene-d8	9.5		10.00		95.0	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21469** RunNo: **21469**
Prep Date: Analysis Date: **9/25/2014** SeqNo: **627689** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.3	70	130			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	20	1.0	20.00	0	101	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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R21469** RunNo: **21469**

Prep Date: Analysis Date: **9/25/2014** SeqNo: **627689** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	82.6	131			
Trichloroethene (TCE)	18	1.0	20.00	0	89.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.7	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.6	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.4	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21508** RunNo: **21508**

Prep Date: Analysis Date: **9/26/2014** SeqNo: **629218** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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.
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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 Annual GW

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21508** RunNo: **21508**
Prep Date: Analysis Date: **9/26/2014** SeqNo: **629218** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			

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#: 1409A33

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21508** RunNo: **21508**

Prep Date: Analysis Date: **9/26/2014** SeqNo: **629218** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.8		10.00		97.8	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.0	70	130			
Surr: Toluene-d8	9.3		10.00		92.9	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **R21508** RunNo: **21508**

Prep Date: Analysis Date: **9/26/2014** SeqNo: **629220** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	100	80	120			
Chlorobenzene	19	1.0	20.00	0	96.2	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	114	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	93.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.8	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.2	70	130			
Surr: Toluene-d8	9.7		10.00		96.5	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **R21507** RunNo: **21507**

Prep Date: Analysis Date: **9/29/2014** SeqNo: **629602** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 Annual GW

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R21507**	RunNo: **21507**	
Prep Date:	Analysis Date: **9/29/2014**	SeqNo: **629602**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

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.
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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 Annual GW

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21507** RunNo: **21507**
Prep Date: Analysis Date: **9/29/2014** SeqNo: **629602** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.9	70	130			
Surr: Toluene-d8	9.2		10.00		92.4	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21507** RunNo: **21507**
Prep Date: Analysis Date: **9/29/2014** SeqNo: **629604** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.5	70	130			
Toluene	19	1.0	20.00	0	96.4	80	120			
Chlorobenzene	18	1.0	20.00	0	91.8	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	82.6	131			
Trichloroethene (TCE)	18	1.0	20.00	0	90.2	70	130			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.8	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.1	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 Annual GW

Sample ID **mb-15440**	SampType: **MBLK**		TestCode: **EPA Method 8270C: Semivolatiles**		
Client ID: **PBW**	Batch ID: **15440**		RunNo: **21434**		
Prep Date: **9/23/2014**	Analysis Date: **9/24/2014**		SeqNo: **626587**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: 1409A33

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **mb-15440**	SampType: **MBLK**		TestCode: **EPA Method 8270C: Semivolatiles**		
Client ID: **PBW**	Batch ID: **15440**		RunNo: **21434**		
Prep Date: **9/23/2014**	Analysis Date: **9/24/2014**		SeqNo: **626587**	Units: **µg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	160		200.0		78.4	12.1	85.8			
Surr: Phenol-d5	140		200.0		67.7	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	150		200.0		75.5	26	138			
Surr: Nitrobenzene-d5	87		100.0		87.5	47.5	119			
Surr: 2-Fluorobiphenyl	84		100.0		83.6	48.1	106			
Surr: 4-Terphenyl-d14	88		100.0		87.9	44	113			

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#: **1409A33**

17-Oct-14

Client: Western Refining Southwest, Gallup

Project: 2014 Annual GW

Sample ID **lcs-15440** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**

Client ID: **LCSW** Batch ID: **15440** RunNo: **21434**

Prep Date: **9/23/2014** Analysis Date: **9/24/2014** SeqNo: **626588** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	83.1	47.9	114			
4-Chloro-3-methylphenol	180	10	200.0	0	88.5	51.7	122			
2-Chlorophenol	170	10	200.0	0	85.6	40.7	113			
1,4-Dichlorobenzene	69	10	100.0	0	69.4	39.6	99.9			
2,4-Dinitrotoluene	79	10	100.0	0	78.9	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	78.8	51.2	111			
4-Nitrophenol	140	10	200.0	0	71.5	15.7	86.9			
Pentachlorophenol	120	20	200.0	0	60.9	21.6	104			
Phenol	150	10	200.0	0	73.2	28.6	71.7			S
Pyrene	84	10	100.0	0	84.3	54.2	128			
1,2,4-Trichlorobenzene	73	10	100.0	0	73.1	40.9	101			
Surr: 2-Fluorophenol	150		200.0		74.6	12.1	85.8			
Surr: Phenol-d5	130		200.0		67.4	17.7	65.8			S
Surr: 2,4,6-Tribromophenol	150		200.0		73.1	26	138			
Surr: Nitrobenzene-d5	86		100.0		86.1	47.5	119			
Surr: 2-Fluorobiphenyl	81		100.0		80.9	48.1	106			
Surr: 4-Terphenyl-d14	82		100.0		82.2	44	113			

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		

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: 1409A33 RcptNo: 1

Received by/date: AT 09/19/14

Logged By: Ashley Gallegos 9/19/2014 12:45:00 PM

Completed By: Ashley Gallegos 9/22/2014 10:37:26 AM

Reviewed By: MS / MJ 09/22/14

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° 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 ☑ 09/22/14 NA ☐
   See Remarks
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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 18 (<2 or >12 unless noted)
Adjusted? YES
Checked by: MJ

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: For Metals analysis: Added 1 mL HNO3 to -007B for acceptable pH. Added 0.4 mL HNO3 to 008F for acceptable pH. Held in login for 24 hrs. MJ 09/22/14

18. Cooler Information

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

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2014 ANNUAL GW

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: X Yes ☐ No

Sample Temperature: 2.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1410943	8260B + MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	VOCs										Air Bubbles (Y or N)
		09/19/14																				
		AS																				
9/19/14		Aq	TB-#5									X										
9/19/14			TB-#4									X										
9/19/14			TB-#3									X										
9/19/14			TB-#2									X										
9/19/14		H_2O	TB-#1			-010-001						X										
9/15/14		H_2O	BD-MKTF-9/15/14			-011-002			X													
9/15/14	0945	H_2O	FB-Group7-9/15/14			-012-003	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/19/14	1245			09/19/14	1245
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Page 1 of 2

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.

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2014 ANNUAL GW

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: X Yes ☐ No

Sample Temperature: 1.0

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409A33	8260B + MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)										Air Bubbles (Y or N)
9/15/14	0945	H_2O	MKTF-04			-004	X	X	X	X	X										
9/15/14	1030	H_2O	MKTF-~~2~~11			-005	X	X	X	X	X										
9/17/14	0940	H_2O	MKTF-15			-006	X	X	X	X	X										
9/17/14	1100	H_2O	MKTF-16			-007	X	X	X	X	X										
9/18/14	0815	H_2O	MKTF-10			-008	X	X	X	X	X										
9/18/14	0900	H_2O	MKTF-9			-009	X	X	X	X	X										
9/18/14	0930	H_2O	MKTF-2			-010	X	X	X	X	X										
9/18/14	1440	H_2O	MKTF-18			~~-008~~ 11	X	X	X	X	X										
9/18/14	1520	H_2O	MKTF-17			~~-009~~ 12	X	X	X	X	X										

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/19/14	1245			09/19/14	1245
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Page 2 of 2

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.

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

October 06, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX: (505) 722-0210

RE: 2014 3rd QUARTER MKTF WELLS OrderNo.: 1409D05

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/25/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:00:00 PM
Lab ID: 1409D05-001
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	14	1.0		mg/L	1	9/27/2014 4:31:50 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 4:31:50 AM	15542
Surr: DNOP	108	59-141		%REC	1	9/27/2014 4:31:50 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	23	5.0		mg/L	100	10/3/2014 5:17:52 PM	R21651
Surr: BFB	94.2	70.9-130		%REC	100	10/3/2014 5:17:52 PM	R21651
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 10:56:57 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 10:56:57 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:00:00 PM
Lab ID: 1409D05-001
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 10:56:57 PM	15566
2,4-Dimethylphenol	27	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 10:56:57 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 10:56:57 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
1-Methylnaphthalene	75	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2-Methylnaphthalene	79	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2-Methylphenol	34	20		µg/L	1	9/29/2014 10:56:57 PM	15566
3+4-Methylphenol	25	10		µg/L	1	9/29/2014 10:56:57 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Naphthalene	130	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 10:56:57 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Phenol	22	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566

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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Lab ID: 1409D05-001
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Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 10:56:57 PM	15566
Surr: 2-Fluorophenol	60.2	12.1-85.8		%REC	1	9/29/2014 10:56:57 PM	15566
Surr: Phenol-d5	56.6	17.7-65.8		%REC	1	9/29/2014 10:56:57 PM	15566
Surr: 2,4,6-Tribromophenol	105	26-138		%REC	1	9/29/2014 10:56:57 PM	15566
Surr: Nitrobenzene-d5	89.4	47.5-119		%REC	1	9/29/2014 10:56:57 PM	15566
Surr: 2-Fluorobiphenyl	88.5	48.1-106		%REC	1	9/29/2014 10:56:57 PM	15566
Surr: 4-Terphenyl-d14	94.7	44-113		%REC	1	9/29/2014 10:56:57 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	2700	100		µg/L	100	10/3/2014 12:17:51 PM	R21646
Toluene	1400	100		µg/L	100	10/3/2014 12:17:51 PM	R21646
Ethylbenzene	340	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Methyl tert-butyl ether (MTBE)	480	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2,4-Trimethylbenzene	540	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,3,5-Trimethylbenzene	150	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Naphthalene	100	20		µg/L	10	10/3/2014 12:47:26 PM	R21646
1-Methylnaphthalene	ND	40		µg/L	10	10/3/2014 12:47:26 PM	R21646
2-Methylnaphthalene	41	40		µg/L	10	10/3/2014 12:47:26 PM	R21646
Acetone	ND	100		µg/L	10	10/3/2014 12:47:26 PM	R21646
Bromobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Bromodichloromethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Bromoform	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Bromomethane	ND	30		µg/L	10	10/3/2014 12:47:26 PM	R21646
2-Butanone	ND	100		µg/L	10	10/3/2014 12:47:26 PM	R21646
Carbon disulfide	ND	100		µg/L	10	10/3/2014 12:47:26 PM	R21646
Carbon Tetrachloride	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Chlorobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Chloroethane	ND	20		µg/L	10	10/3/2014 12:47:26 PM	R21646
Chloroform	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Chloromethane	ND	30		µg/L	10	10/3/2014 12:47:26 PM	R21646
2-Chlorotoluene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
4-Chlorotoluene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
cis-1,2-DCE	29	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
cis-1,3-Dichloropropene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	10/3/2014 12:47:26 PM	R21646
Dibromochloromethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Dibromomethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2-Dichlorobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:00:00 PM
Lab ID: 1409D05-001
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,4-Dichlorobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Dichlorodifluoromethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1-Dichloroethane	92	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1-Dichloroethene	47	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2-Dichloropropane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,3-Dichloropropane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
2,2-Dichloropropane	ND	20		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1-Dichloropropene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Hexachlorobutadiene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
2-Hexanone	ND	100		µg/L	10	10/3/2014 12:47:26 PM	R21646
Isopropylbenzene	26	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
4-Isopropyltoluene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
4-Methyl-2-pentanone	ND	100		µg/L	10	10/3/2014 12:47:26 PM	R21646
Methylene Chloride	ND	30		µg/L	10	10/3/2014 12:47:26 PM	R21646
n-Butylbenzene	ND	30		µg/L	10	10/3/2014 12:47:26 PM	R21646
n-Propylbenzene	58	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
sec-Butylbenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Styrene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
tert-Butylbenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	10/3/2014 12:47:26 PM	R21646
Tetrachloroethene (PCE)	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
trans-1,2-DCE	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
trans-1,3-Dichloropropene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2,3-Trichlorobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2,4-Trichlorobenzene	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1,1-Trichloroethane	24	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,1,2-Trichloroethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Trichloroethene (TCE)	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Trichlorofluoromethane	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
1,2,3-Trichloropropane	ND	20		µg/L	10	10/3/2014 12:47:26 PM	R21646
Vinyl chloride	ND	10		µg/L	10	10/3/2014 12:47:26 PM	R21646
Xylenes, Total	1600	15		µg/L	10	10/3/2014 12:47:26 PM	R21646
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	10	10/3/2014 12:47:26 PM	R21646
Surr: 4-Bromofluorobenzene	109	70-130		%REC	10	10/3/2014 12:47:26 PM	R21646
Surr: Dibromofluoromethane	92.9	70-130		%REC	10	10/3/2014 12:47:26 PM	R21646
Surr: Toluene-d8	94.7	70-130		%REC	10	10/3/2014 12:47:26 PM	R21646

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:30:00 PM
Lab ID: 1409D05-002
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 5:01:50 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 5:01:50 AM	15542
Surr: DNOP	117	59-141		%REC	1	9/27/2014 5:01:50 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.25	0.050		mg/L	1	10/3/2014 5:48:07 PM	R21651
Surr: BFB	84.0	70.9-130		%REC	1	10/3/2014 5:48:07 PM	R21651
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:30:00 PM
Lab ID: 1409D05-002
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 11:24:42 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:30:00 PM
Lab ID: 1409D05-002
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 11:24:42 PM	15566
Surr: 2-Fluorophenol	70.7	12.1-85.8		%REC	1	9/29/2014 11:24:42 PM	15566
Surr: Phenol-d5	64.8	17.7-65.8		%REC	1	9/29/2014 11:24:42 PM	15566
Surr: 2,4,6-Tribromophenol	79.1	26-138		%REC	1	9/29/2014 11:24:42 PM	15566
Surr: Nitrobenzene-d5	89.5	47.5-119		%REC	1	9/29/2014 11:24:42 PM	15566
Surr: 2-Fluorobiphenyl	83.1	48.1-106		%REC	1	9/29/2014 11:24:42 PM	15566
Surr: 4-Terphenyl-d14	85.2	44-113		%REC	1	9/29/2014 11:24:42 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Toluene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Ethylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Methyl tert-butyl ether (MTBE)	450	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Naphthalene	ND	10		µg/L	5	10/3/2014 1:46:37 PM	R21646
1-Methylnaphthalene	ND	20		µg/L	5	10/3/2014 1:46:37 PM	R21646
2-Methylnaphthalene	ND	20		µg/L	5	10/3/2014 1:46:37 PM	R21646
Acetone	ND	50		µg/L	5	10/3/2014 1:46:37 PM	R21646
Bromobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Bromodichloromethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Bromoform	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Bromomethane	ND	15		µg/L	5	10/3/2014 1:46:37 PM	R21646
2-Butanone	ND	50		µg/L	5	10/3/2014 1:46:37 PM	R21646
Carbon disulfide	ND	50		µg/L	5	10/3/2014 1:46:37 PM	R21646
Carbon Tetrachloride	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Chlorobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Chloroethane	ND	10		µg/L	5	10/3/2014 1:46:37 PM	R21646
Chloroform	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Chloromethane	ND	15		µg/L	5	10/3/2014 1:46:37 PM	R21646
2-Chlorotoluene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
4-Chlorotoluene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
cis-1,2-DCE	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	10/3/2014 1:46:37 PM	R21646
Dibromochloromethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Dibromomethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2-Dichlorobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:30:00 PM
Lab ID: 1409D05-002
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,4-Dichlorobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Dichlorodifluoromethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1-Dichloroethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1-Dichloroethene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2-Dichloropropane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,3-Dichloropropane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
2,2-Dichloropropane	ND	10		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1-Dichloropropene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Hexachlorobutadiene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
2-Hexanone	ND	50		µg/L	5	10/3/2014 1:46:37 PM	R21646
Isopropylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
4-Isopropyltoluene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
4-Methyl-2-pentanone	ND	50		µg/L	5	10/3/2014 1:46:37 PM	R21646
Methylene Chloride	ND	15		µg/L	5	10/3/2014 1:46:37 PM	R21646
n-Butylbenzene	ND	15		µg/L	5	10/3/2014 1:46:37 PM	R21646
n-Propylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
sec-Butylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Styrene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
tert-Butylbenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	10/3/2014 1:46:37 PM	R21646
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
trans-1,2-DCE	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1,1-Trichloroethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,1,2-Trichloroethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Trichloroethene (TCE)	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Trichlorofluoromethane	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
1,2,3-Trichloropropane	ND	10		µg/L	5	10/3/2014 1:46:37 PM	R21646
Vinyl chloride	ND	5.0		µg/L	5	10/3/2014 1:46:37 PM	R21646
Xylenes, Total	ND	7.5		µg/L	5	10/3/2014 1:46:37 PM	R21646
Surr: 1,2-Dichloroethane-d4	87.4	70-130		%REC	5	10/3/2014 1:46:37 PM	R21646
Surr: 4-Bromofluorobenzene	106	70-130		%REC	5	10/3/2014 1:46:37 PM	R21646
Surr: Dibromofluoromethane	89.3	70-130		%REC	5	10/3/2014 1:46:37 PM	R21646
Surr: Toluene-d8	96.7	70-130		%REC	5	10/3/2014 1:46:37 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:55:00 PM
Lab ID: 1409D05-003
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 5:31:17 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 5:31:17 AM	15542
Surr: DNOP	120	59-141		%REC	1	9/27/2014 5:31:17 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.23	0.050		mg/L	1	10/3/2014 6:18:13 PM	R21651
Surr: BFB	104	70.9-130		%REC	1	10/3/2014 6:18:13 PM	R21651
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Acenaphthylene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Aniline	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Anthracene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Azobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Benzoic acid	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
Benzyl alcohol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Carbazole	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4-Chloroaniline	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2-Chlorophenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Chrysene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Dibenzofuran	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:55:00 PM
Lab ID: 1409D05-003
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Diethyl phthalate	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Fluoranthene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Fluorene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Hexachloroethane	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Isophorone	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2-Methylphenol	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Naphthalene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2-Nitroaniline	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
3-Nitroaniline	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4-Nitroaniline	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Nitrobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2-Nitrophenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
4-Nitrophenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Pentachlorophenol	ND	20		µg/L	1	9/29/2014 11:52:26 PM	15566
Phenanthrene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Phenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Pyrene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Pyridine	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:55:00 PM
Lab ID: 1409D05-003
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/29/2014 11:52:26 PM	15566
Surr: 2-Fluorophenol	69.8	12.1-85.8		%REC	1	9/29/2014 11:52:26 PM	15566
Surr: Phenol-d5	62.5	17.7-65.8		%REC	1	9/29/2014 11:52:26 PM	15566
Surr: 2,4,6-Tribromophenol	73.7	26-138		%REC	1	9/29/2014 11:52:26 PM	15566
Surr: Nitrobenzene-d5	84.0	47.5-119		%REC	1	9/29/2014 11:52:26 PM	15566
Surr: 2-Fluorobiphenyl	76.1	48.1-106		%REC	1	9/29/2014 11:52:26 PM	15566
Surr: 4-Terphenyl-d14	76.9	44-113		%REC	1	9/29/2014 11:52:26 PM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Toluene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Ethylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Methyl tert-butyl ether (MTBE)	320	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2-Dichloroethane (EDC)	29	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Naphthalene	ND	10		µg/L	5	10/3/2014 3:15:25 PM	R21646
1-Methylnaphthalene	ND	20		µg/L	5	10/3/2014 3:15:25 PM	R21646
2-Methylnaphthalene	ND	20		µg/L	5	10/3/2014 3:15:25 PM	R21646
Acetone	ND	50		µg/L	5	10/3/2014 3:15:25 PM	R21646
Bromobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Bromodichloromethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Bromoform	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Bromomethane	ND	15		µg/L	5	10/3/2014 3:15:25 PM	R21646
2-Butanone	ND	50		µg/L	5	10/3/2014 3:15:25 PM	R21646
Carbon disulfide	ND	50		µg/L	5	10/3/2014 3:15:25 PM	R21646
Carbon Tetrachloride	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Chlorobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Chloroethane	ND	10		µg/L	5	10/3/2014 3:15:25 PM	R21646
Chloroform	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Chloromethane	ND	15		µg/L	5	10/3/2014 3:15:25 PM	R21646
2-Chlorotoluene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
4-Chlorotoluene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
cis-1,2-DCE	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	10/3/2014 3:15:25 PM	R21646
Dibromochloromethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Dibromomethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2-Dichlorobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 2:55:00 PM
Lab ID: 1409D05-003
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,4-Dichlorobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Dichlorodifluoromethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1-Dichloroethane	23	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1-Dichloroethene	54	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2-Dichloropropane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,3-Dichloropropane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
2,2-Dichloropropane	ND	10		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1-Dichloropropene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Hexachlorobutadiene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
2-Hexanone	ND	50		µg/L	5	10/3/2014 3:15:25 PM	R21646
Isopropylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
4-Isopropyltoluene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
4-Methyl-2-pentanone	ND	50		µg/L	5	10/3/2014 3:15:25 PM	R21646
Methylene Chloride	ND	15		µg/L	5	10/3/2014 3:15:25 PM	R21646
n-Butylbenzene	ND	15		µg/L	5	10/3/2014 3:15:25 PM	R21646
n-Propylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
sec-Butylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Styrene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
tert-Butylbenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	10/3/2014 3:15:25 PM	R21646
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
trans-1,2-DCE	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1,1-Trichloroethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,1,2-Trichloroethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Trichloroethene (TCE)	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Trichlorofluoromethane	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
1,2,3-Trichloropropane	ND	10		µg/L	5	10/3/2014 3:15:25 PM	R21646
Vinyl chloride	ND	5.0		µg/L	5	10/3/2014 3:15:25 PM	R21646
Xylenes, Total	ND	7.5		µg/L	5	10/3/2014 3:15:25 PM	R21646
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	5	10/3/2014 3:15:25 PM	R21646
Surr: 4-Bromofluorobenzene	102	70-130		%REC	5	10/3/2014 3:15:25 PM	R21646
Surr: Dibromofluoromethane	87.9	70-130		%REC	5	10/3/2014 3:15:25 PM	R21646
Surr: Toluene-d8	93.8	70-130		%REC	5	10/3/2014 3:15:25 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:10:00 PM
Lab ID: 1409D05-004
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 6:00:44 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 6:00:44 AM	15542
Surr: DNOP	126	59-141		%REC	1	9/27/2014 6:00:44 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.061	0.050		mg/L	1	10/3/2014 6:48:15 PM	R21651
Surr: BFB	93.4	70.9-130		%REC	1	10/3/2014 6:48:15 PM	R21651
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Acenaphthylene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Aniline	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Anthracene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Azobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Benz(a)anthracene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Benzo(a)pyrene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Benzo(b)fluoranthene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Benzo(g,h,i)perylene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Benzo(k)fluoranthene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Benzoic acid	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
Benzyl alcohol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Bis(2-chloroethoxy)methane	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Bis(2-chloroethyl)ether	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Bis(2-chloroisopropyl)ether	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Bis(2-ethylhexyl)phthalate	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4-Bromophenyl phenyl ether	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Butyl benzyl phthalate	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Carbazole	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4-Chloro-3-methylphenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4-Chloroaniline	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2-Chloronaphthalene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2-Chlorophenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4-Chlorophenyl phenyl ether	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Chrysene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Di-n-butyl phthalate	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Di-n-octyl phthalate	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
Dibenz(a,h)anthracene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Dibenzofuran	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
1,2-Dichlorobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
1,3-Dichlorobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:10:00 PM
Lab ID: 1409D05-004
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
3,3´-Dichlorobenzidine	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Diethyl phthalate	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Dimethyl phthalate	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2,4-Dichlorophenol	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
2,4-Dimethylphenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4,6-Dinitro-2-methylphenol	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
2,4-Dinitrophenol	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
2,4-Dinitrotoluene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2,6-Dinitrotoluene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Fluoranthene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Fluorene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Hexachlorobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Hexachlorobutadiene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Hexachlorocyclopentadiene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Hexachloroethane	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Indeno(1,2,3-cd)pyrene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Isophorone	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
1-Methylnaphthalene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2-Methylnaphthalene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2-Methylphenol	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
3+4-Methylphenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
N-Nitrosodi-n-propylamine	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
N-Nitrosodimethylamine	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
N-Nitrosodiphenylamine	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Naphthalene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2-Nitroaniline	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
3-Nitroaniline	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4-Nitroaniline	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Nitrobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2-Nitrophenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
4-Nitrophenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Pentachlorophenol	ND	25		µg/L	1	9/30/2014 4:32:53 PM	15605
Phenanthrene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Phenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Pyrene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Pyridine	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
1,2,4-Trichlorobenzene	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
2,4,5-Trichlorophenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:10:00 PM
Lab ID: 1409D05-004
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	12		µg/L	1	9/30/2014 4:32:53 PM	15605
Surr: 2-Fluorophenol	47.9	12.1-85.8		%REC	1	9/30/2014 4:32:53 PM	15605
Surr: Phenol-d5	53.2	17.7-65.8		%REC	1	9/30/2014 4:32:53 PM	15605
Surr: 2,4,6-Tribromophenol	33.3	26-138		%REC	1	9/30/2014 4:32:53 PM	15605
Surr: Nitrobenzene-d5	83.1	47.5-119		%REC	1	9/30/2014 4:32:53 PM	15605
Surr: 2-Fluorobiphenyl	71.6	48.1-106		%REC	1	9/30/2014 4:32:53 PM	15605
Surr: 4-Terphenyl-d14	79.5	44-113		%REC	1	9/30/2014 4:32:53 PM	15605
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Toluene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Methyl tert-butyl ether (MTBE)	55	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2-Dichloroethane (EDC)	13	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Naphthalene	ND	2.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Acetone	ND	10		µg/L	1	10/3/2014 3:45:04 PM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Bromoform	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Bromomethane	ND	3.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
2-Butanone	ND	10		µg/L	1	10/3/2014 3:45:04 PM	R21646
Carbon disulfide	ND	10		µg/L	1	10/3/2014 3:45:04 PM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Chloroethane	ND	2.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Chloroform	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Chloromethane	ND	3.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
cis-1,2-DCE	1.8	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:10:00 PM
Lab ID: 1409D05-004
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1-Dichloroethane	22	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1-Dichloroethene	41	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
2-Hexanone	ND	10		µg/L	1	10/3/2014 3:45:04 PM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/3/2014 3:45:04 PM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Styrene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1,1-Trichloroethane	3.7	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,1,2-Trichloroethane	1.6	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Trichloroethene (TCE)	2.4	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/3/2014 3:45:04 PM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/3/2014 3:45:04 PM	R21646
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	10/3/2014 3:45:04 PM	R21646
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	10/3/2014 3:45:04 PM	R21646
Surr: Dibromofluoromethane	87.9	70-130		%REC	1	10/3/2014 3:45:04 PM	R21646
Surr: Toluene-d8	92.7	70-130		%REC	1	10/3/2014 3:45:04 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:30:00 PM
Lab ID: 1409D05-005
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/27/2014 6:30:19 AM	15542
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/27/2014 6:30:19 AM	15542
Surr: DNOP	125	59-141		%REC	1	9/27/2014 6:30:19 AM	15542
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	5.8	1.0		mg/L	20	10/4/2014 1:19:58 AM	R21651
Surr: BFB	105	70.9-130		%REC	20	10/4/2014 1:19:58 AM	R21651
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Acenaphthylene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Aniline	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Anthracene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Azobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Benzoic acid	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
Benzyl alcohol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Carbazole	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4-Chloroaniline	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2-Chlorophenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Chrysene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Dibenzofuran	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:30:00 PM
Lab ID: 1409D05-005
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Diethyl phthalate	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
2,4-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Fluoranthene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Fluorene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Hexachloroethane	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Isophorone	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2-Methylphenol	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Naphthalene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2-Nitroaniline	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
3-Nitroaniline	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4-Nitroaniline	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Nitrobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2-Nitrophenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
4-Nitrophenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Pentachlorophenol	ND	20		µg/L	1	9/30/2014 12:47:41 AM	15566
Phenanthrene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Phenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Pyrene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Pyridine	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:30:00 PM
Lab ID: 1409D05-005
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/30/2014 12:47:41 AM	15566
Surr: 2-Fluorophenol	85.6	12.1-85.8		%REC	1	9/30/2014 12:47:41 AM	15566
Surr: Phenol-d5	81.9	17.7-65.8	S	%REC	1	9/30/2014 12:47:41 AM	15566
Surr: 2,4,6-Tribromophenol	99.6	26-138		%REC	1	9/30/2014 12:47:41 AM	15566
Surr: Nitrobenzene-d5	107	47.5-119		%REC	1	9/30/2014 12:47:41 AM	15566
Surr: 2-Fluorobiphenyl	101	48.1-106		%REC	1	9/30/2014 12:47:41 AM	15566
Surr: 4-Terphenyl-d14	97.0	44-113		%REC	1	9/30/2014 12:47:41 AM	15566
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	530	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Toluene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Ethylbenzene	12	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Methyl tert-butyl ether (MTBE)	230	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2,4-Trimethylbenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,3,5-Trimethylbenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Naphthalene	ND	20		µg/L	10	10/3/2014 4:14:45 PM	R21646
1-Methylnaphthalene	ND	40		µg/L	10	10/3/2014 4:14:45 PM	R21646
2-Methylnaphthalene	ND	40		µg/L	10	10/3/2014 4:14:45 PM	R21646
Acetone	ND	100		µg/L	10	10/3/2014 4:14:45 PM	R21646
Bromobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Bromodichloromethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Bromoform	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Bromomethane	ND	30		µg/L	10	10/3/2014 4:14:45 PM	R21646
2-Butanone	ND	100		µg/L	10	10/3/2014 4:14:45 PM	R21646
Carbon disulfide	ND	100		µg/L	10	10/3/2014 4:14:45 PM	R21646
Carbon Tetrachloride	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Chlorobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Chloroethane	ND	20		µg/L	10	10/3/2014 4:14:45 PM	R21646
Chloroform	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Chloromethane	ND	30		µg/L	10	10/3/2014 4:14:45 PM	R21646
2-Chlorotoluene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
4-Chlorotoluene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
cis-1,2-DCE	46	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
cis-1,3-Dichloropropene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	10/3/2014 4:14:45 PM	R21646
Dibromochloromethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Dibromomethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2-Dichlorobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 3:30:00 PM
Lab ID: 1409D05-005
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,4-Dichlorobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Dichlorodifluoromethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1-Dichloroethane	250	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1-Dichloroethene	100	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2-Dichloropropane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,3-Dichloropropane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
2,2-Dichloropropane	ND	20		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1-Dichloropropene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Hexachlorobutadiene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
2-Hexanone	ND	100		µg/L	10	10/3/2014 4:14:45 PM	R21646
Isopropylbenzene	38	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
4-Isopropyltoluene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
4-Methyl-2-pentanone	ND	100		µg/L	10	10/3/2014 4:14:45 PM	R21646
Methylene Chloride	ND	30		µg/L	10	10/3/2014 4:14:45 PM	R21646
n-Butylbenzene	ND	30		µg/L	10	10/3/2014 4:14:45 PM	R21646
n-Propylbenzene	41	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
sec-Butylbenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Styrene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
tert-Butylbenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	10/3/2014 4:14:45 PM	R21646
Tetrachloroethene (PCE)	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
trans-1,2-DCE	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
trans-1,3-Dichloropropene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2,3-Trichlorobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2,4-Trichlorobenzene	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1,1-Trichloroethane	30	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,1,2-Trichloroethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Trichloroethene (TCE)	24	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Trichlorofluoromethane	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
1,2,3-Trichloropropane	ND	20		µg/L	10	10/3/2014 4:14:45 PM	R21646
Vinyl chloride	ND	10		µg/L	10	10/3/2014 4:14:45 PM	R21646
Xylenes, Total	ND	15		µg/L	10	10/3/2014 4:14:45 PM	R21646
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	10	10/3/2014 4:14:45 PM	R21646
Surr: 4-Bromofluorobenzene	104	70-130		%REC	10	10/3/2014 4:14:45 PM	R21646
Surr: Dibromofluoromethane	96.2	70-130		%REC	10	10/3/2014 4:14:45 PM	R21646
Surr: Toluene-d8	90.0	70-130		%REC	10	10/3/2014 4:14:45 PM	R21646

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 1:00:00 PM
Lab ID: 1409D05-006
Matrix: TRIP BLANK
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/4/2014 1:49:46 AM	R21651
Surr: BFB	87.8	70.9-130		%REC	1	10/4/2014 1:49:46 AM	R21651
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Toluene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Naphthalene	ND	2.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Acetone	ND	10		µg/L	1	10/3/2014 4:44:24 PM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Bromoform	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Bromomethane	ND	3.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
2-Butanone	ND	10		µg/L	1	10/3/2014 4:44:24 PM	R21646
Carbon disulfide	ND	10		µg/L	1	10/3/2014 4:44:24 PM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Chloroethane	ND	2.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Chloroform	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Chloromethane	ND	3.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1-Dichloroethene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 1:00:00 PM
Lab ID: 1409D05-006
Matrix: TRIP BLANK
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,2-Dichloropropane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
2-Hexanone	ND	10		µg/L	1	10/3/2014 4:44:24 PM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/3/2014 4:44:24 PM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Styrene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/3/2014 4:44:24 PM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/3/2014 4:44:24 PM	R21646
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%REC	1	10/3/2014 4:44:24 PM	R21646
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/3/2014 4:44:24 PM	R21646
Surr: Dibromofluoromethane	88.8	70-130		%REC	1	10/3/2014 4:44:24 PM	R21646
Surr: Toluene-d8	97.7	70-130		%REC	1	10/3/2014 4:44:24 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 1:00:00 PM
Lab ID: 1409D05-007
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Toluene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Ethylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Naphthalene	ND	2.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1-Methylnaphthalene	ND	4.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
2-Methylnaphthalene	ND	4.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Acetone	ND	10		µg/L	1	10/3/2014 5:14:01 PM	R21646
Bromobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Bromodichloromethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Bromoform	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Bromomethane	ND	3.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
2-Butanone	ND	10		µg/L	1	10/3/2014 5:14:01 PM	R21646
Carbon disulfide	ND	10		µg/L	1	10/3/2014 5:14:01 PM	R21646
Carbon Tetrachloride	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Chlorobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Chloroethane	ND	2.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Chloroform	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Chloromethane	ND	3.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
2-Chlorotoluene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
4-Chlorotoluene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
cis-1,2-DCE	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Dibromochloromethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Dibromomethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,1-Dichloroethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,1-Dichloroethene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2-Dichloropropane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,3-Dichloropropane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
2,2-Dichloropropane	ND	2.0		µg/L	1	10/3/2014 5:14:01 PM	R21646

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014 1:00:00 PM
Lab ID: 1409D05-007
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Hexachlorobutadiene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
2-Hexanone	ND	10		µg/L	1	10/3/2014 5:14:01 PM	R21646
Isopropylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
4-Isopropyltoluene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
4-Methyl-2-pentanone	ND	10		µg/L	1	10/3/2014 5:14:01 PM	R21646
Methylene Chloride	ND	3.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
n-Butylbenzene	ND	3.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
n-Propylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
sec-Butylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Styrene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
tert-Butylbenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
trans-1,2-DCE	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Trichlorofluoromethane	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Vinyl chloride	ND	1.0		µg/L	1	10/3/2014 5:14:01 PM	R21646
Xylenes, Total	ND	1.5		µg/L	1	10/3/2014 5:14:01 PM	R21646
Surr: 1,2-Dichloroethane-d4	85.3	70-130		%REC	1	10/3/2014 5:14:01 PM	R21646
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	1	10/3/2014 5:14:01 PM	R21646
Surr: Dibromofluoromethane	88.0	70-130		%REC	1	10/3/2014 5:14:01 PM	R21646
Surr: Toluene-d8	91.8	70-130		%REC	1	10/3/2014 5:14:01 PM	R21646

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-9/23/14
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014
Lab ID: 1409D05-008
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
Acenaphthene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Acenaphthylene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Aniline	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Anthracene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Azobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Benz(a)anthracene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Benzo(a)pyrene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Benzo(b)fluoranthene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Benzo(g,h,i)perylene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Benzo(k)fluoranthene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Benzoic acid	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566
Benzyl alcohol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Bis(2-chloroethyl)ether	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4-Bromophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Butyl benzyl phthalate	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Carbazole	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4-Chloro-3-methylphenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4-Chloroaniline	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2-Chloronaphthalene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2-Chlorophenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Chrysene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Di-n-butyl phthalate	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Di-n-octyl phthalate	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566
Dibenz(a,h)anthracene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Dibenzofuran	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
1,2-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
1,3-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
1,4-Dichlorobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
3,3´-Dichlorobenzidine	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Diethyl phthalate	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Dimethyl phthalate	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2,4-Dichlorophenol	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566
2,4-Dimethylphenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566
2,4-Dinitrophenol	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-9/23/14
Project: 2014 3rd QUARTER MKTF WELLS
Collection Date: 9/23/2014
Lab ID: 1409D05-008
Matrix: AQUEOUS
Received Date: 9/25/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2,6-Dinitrotoluene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Fluoranthene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Fluorene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Hexachlorobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Hexachlorobutadiene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Hexachlorocyclopentadiene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Hexachloroethane	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Isophorone	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
1-Methylnaphthalene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2-Methylnaphthalene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2-Methylphenol	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566
3+4-Methylphenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
N-Nitrosodimethylamine	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
N-Nitrosodiphenylamine	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Naphthalene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2-Nitroaniline	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
3-Nitroaniline	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4-Nitroaniline	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Nitrobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2-Nitrophenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
4-Nitrophenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Pentachlorophenol	ND	20		µg/L	1	9/30/2014 1:15:17 AM	15566
Phenanthrene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Phenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Pyrene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Pyridine	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
1,2,4-Trichlorobenzene	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2,4,5-Trichlorophenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
2,4,6-Trichlorophenol	ND	10		µg/L	1	9/30/2014 1:15:17 AM	15566
Surr: 2-Fluorophenol	67.1	12.1-85.8		%REC	1	9/30/2014 1:15:17 AM	15566
Surr: Phenol-d5	64.8	17.7-65.8		%REC	1	9/30/2014 1:15:17 AM	15566
Surr: 2,4,6-Tribromophenol	78.8	26-138		%REC	1	9/30/2014 1:15:17 AM	15566
Surr: Nitrobenzene-d5	82.3	47.5-119		%REC	1	9/30/2014 1:15:17 AM	15566
Surr: 2-Fluorobiphenyl	79.3	48.1-106		%REC	1	9/30/2014 1:15:17 AM	15566
Surr: 4-Terphenyl-d14	80.3	44-113		%REC	1	9/30/2014 1:15:17 AM	15566

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

Qualifiers:

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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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **MB-15542** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **15542** RunNo: **21478**
Prep Date: **9/26/2014** Analysis Date: **9/26/2014** SeqNo: **629535** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.76		1.000		76.0	59	141			

Sample ID: **LCS-15542** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **15542** RunNo: **21478**
Prep Date: **9/26/2014** Analysis Date: **9/26/2014** SeqNo: **629536** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.5	1.0	5.000	0	90.9	69.7	142			
Surr: DNOP	0.45		0.5000		89.5	59	141			

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R21651** RunNo: **21651**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.3	70.9	130			

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R21651** RunNo: **21651**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.4	80	120			
Surr: BFB	20		20.00		101	70.9	130			

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635260** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635260** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.1		10.00		90.7	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635262** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	19	1.0	20.00	0	96.4	80	120			
Chlorobenzene	20	1.0	20.00	0	102	70	130			

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635262** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	109	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	92.8	70	130			
Surr: 1,2-Dichloroethane-d4	5.1		10.00		51.1	70	130			S
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635612** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.9	70	130			
Toluene	19	1.0	20.00	0	95.9	80	120			
Chlorobenzene	19	1.0	20.00	0	96.2	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	95.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.6	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.8	70	130			
Surr: Toluene-d8	9.3		10.00		93.3	70	130			

Sample ID: **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

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.
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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R21646**	RunNo: **21646**	
Prep Date:	Analysis Date: **10/3/2014**	SeqNo: **635614**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

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.
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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R21646** RunNo: **21646**
Prep Date: Analysis Date: **10/3/2014** SeqNo: **635614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.1	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **mb-15566**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **15566**	RunNo: **21529**			
Prep Date: **9/29/2014**	Analysis Date: **9/29/2014**	SeqNo: **630020**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **mb-15566** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **15566** RunNo: **21529**
Prep Date: **9/29/2014** Analysis Date: **9/29/2014** SeqNo: **630020** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.1	12.1	85.8			
Surr: Phenol-d5	110		200.0		57.0	17.7	65.8			
Surr: 2,4,6-Tribromophenol	170		200.0		83.4	26	138			
Surr: Nitrobenzene-d5	76		100.0		76.4	47.5	119			
Surr: 2-Fluorobiphenyl	72		100.0		72.5	48.1	106			
Surr: 4-Terphenyl-d14	86		100.0		85.8	44	113			

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **lcs-15566** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **15566** RunNo: **21529**
Prep Date: **9/29/2014** Analysis Date: **9/29/2014** SeqNo: **630021** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	80.2	47.9	114			
4-Chloro-3-methylphenol	170	10	200.0	0	86.9	51.7	122			
2-Chlorophenol	160	10	200.0	0	79.9	40.7	113			
1,4-Dichlorobenzene	68	10	100.0	0	67.6	39.6	99.9			
2,4-Dinitrotoluene	82	10	100.0	0	81.6	40.8	113			
N-Nitrosodi-n-propylamine	76	10	100.0	0	75.7	51.2	111			
4-Nitrophenol	140	10	200.0	0	69.3	15.7	86.9			
Pentachlorophenol	140	20	200.0	0	69.9	21.6	104			
Phenol	130	10	200.0	0	65.2	28.6	71.7			
Pyrene	89	10	100.0	0	89.4	54.2	128			
1,2,4-Trichlorobenzene	75	10	100.0	0	75.3	40.9	101			
Surr: 2-Fluorophenol	120		200.0		61.2	12.1	85.8			
Surr: Phenol-d5	110		200.0		55.4	17.7	65.8			
Surr: 2,4,6-Tribromophenol	170		200.0		86.0	26	138			
Surr: Nitrobenzene-d5	81		100.0		80.6	47.5	119			
Surr: 2-Fluorobiphenyl	76		100.0		75.9	48.1	106			
Surr: 4-Terphenyl-d14	92		100.0		92.1	44	113			

Sample ID: **mb-15605** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **15605** RunNo: **21556**
Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631137** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **mb-15605** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **15605** RunNo: **21556**
Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631137** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	20								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **mb-15605** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **15605** RunNo: **21556**
Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631137** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.8	12.1	85.8			
Surr: Phenol-d5	120		200.0		59.1	17.7	65.8			
Surr: 2,4,6-Tribromophenol	140		200.0		72.2	26	138			
Surr: Nitrobenzene-d5	83		100.0		82.8	47.5	119			
Surr: 2-Fluorobiphenyl	72		100.0		71.7	48.1	106			
Surr: 4-Terphenyl-d14	91		100.0		91.3	44	113			

Sample ID: **lcs-15605** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **15605** RunNo: **21556**
Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631138** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	71	10	100.0	0	70.8	47.9	114			
4-Chloro-3-methylphenol	160	10	200.0	0	78.9	51.7	122			
2-Chlorophenol	140	10	200.0	0	69.5	40.7	113			
1,4-Dichlorobenzene	68	10	100.0	0	67.5	39.6	99.9			
2,4-Dinitrotoluene	61	10	100.0	0	60.7	40.8	113			
N-Nitrosodi-n-propylamine	68	10	100.0	0	67.5	51.2	111			
4-Nitrophenol	87	10	200.0	0	43.3	15.7	86.9			
Pentachlorophenol	88	20	200.0	0	44.0	21.6	104			
Phenol	110	10	200.0	0	53.6	28.6	71.7			
Pyrene	76	10	100.0	0	76.1	54.2	128			
1,2,4-Trichlorobenzene	74	10	100.0	0	74.4	40.9	101			

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#: **1409D05**
06-Oct-14

Client: Western Refining Southwest, Gallup
Project: 2014 3rd QUARTER MKTF WELLS

Sample ID: **lcs-15605** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **15605** RunNo: **21556**
Prep Date: **9/30/2014** Analysis Date: **9/30/2014** SeqNo: **631138** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	100		200.0		51.2	12.1	85.8			
Surr: Phenol-d5	95		200.0		47.3	17.7	65.8			
Surr: 2,4,6-Tribromophenol	150		200.0		73.2	26	138			
Surr: Nitrobenzene-d5	73		100.0		72.9	47.5	119			
Surr: 2-Fluorobiphenyl	73		100.0		73.3	48.1	106			
Surr: 4-Terphenyl-d14	84		100.0		83.7	44	113			

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
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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1409D05 RcptNo: 1

Received by/date: MG 09/25/14

Logged By: **Lindsay Mangin** 9/25/2014 4:00:00 PM

Completed By: **Lindsay Mangin** 9/26/2014 7:13:41 AM

Reviewed By: IO/CS 09/26/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2014 3rd QUARTER MKTF WELLS

(MKTF - 23, 33, 32, 31, 25)

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409D05	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions									Air Bubbles (Y or N)
9/23/2014	1400	H20	MKTF-23	MISC	MISC	-001	X	X	X												
9/23/2014	1430	H20	MKTF-33	MISC	MISC	-002	X	X	X												
9/23/2014	1455	H20	MKTF-32	MISC	NONE	-003	X	X	X												
9/23/2014	1510	H20	MKTF-31	MISC		-004	X	X	X												
9/23/2014	1530	H20	MKTF-25	MISC		-005	X	X	X												
9/23/2014	1300	H20	TRIP BLANK			-006	X														
9/23/2014	1300	H20	FIELD BLANK			-007	X														
9/23/2014		H20	BD-MKTF-9/23/14	1L AMBER	NONE	-008			X												

Date	Time	Relinquished by:	Received by:	Date	Time
9/25/2014	1030	[signature]	[signature]	9-25-14	1030
9/25/14	1600	[signature]	Michelle Gonzales	09/25/14	1600

Remarks: 8270 RE-SAMPLED. Original samples exceeded holding time.

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.

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

December 04, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1411984

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/22/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 8:30:00 AM
Lab ID: 1411984-001
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/25/2014 3:55:34 PM	16539
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2014 3:55:34 PM	16539
Surr: DNOP	110	59-141		%REC	1	11/25/2014 3:55:34 PM	16539
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/26/2014 3:25:31 PM	R22836
Surr: BFB	89.8	80-120		%REC	1	11/26/2014 3:25:31 PM	R22836
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Acenaphthylene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Aniline	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Anthracene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Azobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Benz(a)anthracene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Benzo(a)pyrene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Benzo(b)fluoranthene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Benzo(g,h,i)perylene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Benzo(k)fluoranthene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Benzoic acid	ND	20		µg/L	1	12/2/2014 4:38:40 PM	16584
Benzyl alcohol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Bis(2-chloroethyl)ether	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4-Bromophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Butyl benzyl phthalate	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Carbazole	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4-Chloro-3-methylphenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4-Chloroaniline	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2-Chloronaphthalene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2-Chlorophenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Chrysene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Di-n-butyl phthalate	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Di-n-octyl phthalate	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Dibenz(a,h)anthracene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Dibenzofuran	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
1,2-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
1,3-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 8:30:00 AM
Lab ID: 1411984-001
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
3,3´-Dichlorobenzidine	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Diethyl phthalate	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Dimethyl phthalate	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2,4-Dichlorophenol	ND	20		µg/L	1	12/2/2014 4:38:40 PM	16584
2,4-Dimethylphenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	12/2/2014 4:38:40 PM	16584
2,4-Dinitrophenol	ND	20		µg/L	1	12/2/2014 4:38:40 PM	16584
2,4-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2,6-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Fluoranthene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Fluorene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Hexachlorobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Hexachlorobutadiene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Hexachlorocyclopentadiene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Hexachloroethane	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Isophorone	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
1-Methylnaphthalene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2-Methylnaphthalene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2-Methylphenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
3+4-Methylphenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
N-Nitrosodimethylamine	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
N-Nitrosodiphenylamine	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Naphthalene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2-Nitroaniline	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
3-Nitroaniline	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4-Nitroaniline	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Nitrobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2-Nitrophenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
4-Nitrophenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Pentachlorophenol	ND	20		µg/L	1	12/2/2014 4:38:40 PM	16584
Phenanthrene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Phenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Pyrene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Pyridine	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
1,2,4-Trichlorobenzene	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
2,4,5-Trichlorophenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584

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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 8:30:00 AM
Lab ID: 1411984-001
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	12/2/2014 4:38:40 PM	16584
Surr: 2-Fluorophenol	75.3	17.6-104		%REC	1	12/2/2014 4:38:40 PM	16584
Surr: Phenol-d5	64.5	17.7-89.9		%REC	1	12/2/2014 4:38:40 PM	16584
Surr: 2,4,6-Tribromophenol	91.5	16.3-122		%REC	1	12/2/2014 4:38:40 PM	16584
Surr: Nitrobenzene-d5	84.9	45.3-117		%REC	1	12/2/2014 4:38:40 PM	16584
Surr: 2-Fluorobiphenyl	95.8	43-113		%REC	1	12/2/2014 4:38:40 PM	16584
Surr: 4-Terphenyl-d14	94.3	47.6-122		%REC	1	12/2/2014 4:38:40 PM	16584
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Toluene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Ethylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Naphthalene	ND	4.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1-Methylnaphthalene	ND	8.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
2-Methylnaphthalene	ND	8.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Acetone	ND	20		µg/L	2	11/25/2014 3:56:09 PM	R22805
Bromobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Bromodichloromethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Bromoform	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Bromomethane	ND	6.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
2-Butanone	ND	20		µg/L	2	11/25/2014 3:56:09 PM	R22805
Carbon disulfide	ND	20		µg/L	2	11/25/2014 3:56:09 PM	R22805
Carbon Tetrachloride	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Chlorobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Chloroethane	ND	4.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Chloroform	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Chloromethane	ND	6.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
2-Chlorotoluene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
4-Chlorotoluene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
cis-1,2-DCE	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Dibromochloromethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Dibromomethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2-Dichlorobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 8:30:00 AM
Lab ID: 1411984-001
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,4-Dichlorobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Dichlorodifluoromethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1-Dichloroethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1-Dichloroethene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2-Dichloropropane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,3-Dichloropropane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
2,2-Dichloropropane	ND	4.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1-Dichloropropene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Hexachlorobutadiene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
2-Hexanone	ND	20		µg/L	2	11/25/2014 3:56:09 PM	R22805
Isopropylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
4-Isopropyltoluene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
4-Methyl-2-pentanone	ND	20		µg/L	2	11/25/2014 3:56:09 PM	R22805
Methylene Chloride	ND	6.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
n-Butylbenzene	ND	6.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
n-Propylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
sec-Butylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Styrene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
tert-Butylbenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
trans-1,2-DCE	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1,1-Trichloroethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,1,2-Trichloroethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Trichloroethene (TCE)	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Trichlorofluoromethane	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
1,2,3-Trichloropropane	ND	4.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Vinyl chloride	ND	2.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Xylenes, Total	ND	3.0		µg/L	2	11/25/2014 3:56:09 PM	R22805
Surr: 1,2-Dichloroethane-d4	86.5	70-130		%REC	2	11/25/2014 3:56:09 PM	R22805
Surr: 4-Bromofluorobenzene	91.3	70-130		%REC	2	11/25/2014 3:56:09 PM	R22805
Surr: Dibromofluoromethane	95.8	70-130		%REC	2	11/25/2014 3:56:09 PM	R22805
Surr: Toluene-d8	89.7	70-130		%REC	2	11/25/2014 3:56:09 PM	R22805

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 9:30:00 AM
Lab ID: 1411984-002
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/25/2014 4:25:45 PM	16539
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2014 4:25:45 PM	16539
Surr: DNOP	110	59-141		%REC	1	11/25/2014 4:25:45 PM	16539
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/26/2014 3:52:49 PM	R22836
Surr: BFB	96.7	80-120		%REC	1	11/26/2014 3:52:49 PM	R22836
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Acenaphthylene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Aniline	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Anthracene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Azobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Benz(a)anthracene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Benzo(a)pyrene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Benzo(b)fluoranthene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Benzo(g,h,i)perylene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Benzo(k)fluoranthene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Benzoic acid	ND	20		µg/L	1	12/2/2014 5:06:02 PM	16584
Benzyl alcohol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Bis(2-chloroethyl)ether	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4-Bromophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Butyl benzyl phthalate	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Carbazole	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4-Chloro-3-methylphenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4-Chloroaniline	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2-Chloronaphthalene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2-Chlorophenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Chrysene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Di-n-butyl phthalate	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Di-n-octyl phthalate	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Dibenz(a,h)anthracene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Dibenzofuran	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
1,2-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
1,3-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 9:30:00 AM
Lab ID: 1411984-002
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
3,3´-Dichlorobenzidine	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Diethyl phthalate	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Dimethyl phthalate	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2,4-Dichlorophenol	ND	20		µg/L	1	12/2/2014 5:06:02 PM	16584
2,4-Dimethylphenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	12/2/2014 5:06:02 PM	16584
2,4-Dinitrophenol	ND	20		µg/L	1	12/2/2014 5:06:02 PM	16584
2,4-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2,6-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Fluoranthene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Fluorene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Hexachlorobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Hexachlorobutadiene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Hexachlorocyclopentadiene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Hexachloroethane	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Isophorone	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
1-Methylnaphthalene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2-Methylnaphthalene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2-Methylphenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
3+4-Methylphenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
N-Nitrosodimethylamine	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
N-Nitrosodiphenylamine	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Naphthalene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2-Nitroaniline	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
3-Nitroaniline	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4-Nitroaniline	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Nitrobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2-Nitrophenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
4-Nitrophenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Pentachlorophenol	ND	20		µg/L	1	12/2/2014 5:06:02 PM	16584
Phenanthrene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Phenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Pyrene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Pyridine	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
1,2,4-Trichlorobenzene	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
2,4,5-Trichlorophenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 9:30:00 AM
Lab ID: 1411984-002
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	12/2/2014 5:06:02 PM	16584
Surr: 2-Fluorophenol	75.4	17.6-104		%REC	1	12/2/2014 5:06:02 PM	16584
Surr: Phenol-d5	65.5	17.7-89.9		%REC	1	12/2/2014 5:06:02 PM	16584
Surr: 2,4,6-Tribromophenol	79.3	16.3-122		%REC	1	12/2/2014 5:06:02 PM	16584
Surr: Nitrobenzene-d5	86.2	45.3-117		%REC	1	12/2/2014 5:06:02 PM	16584
Surr: 2-Fluorobiphenyl	90.6	43-113		%REC	1	12/2/2014 5:06:02 PM	16584
Surr: 4-Terphenyl-d14	97.1	47.6-122		%REC	1	12/2/2014 5:06:02 PM	16584
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Toluene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Naphthalene	ND	2.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Acetone	ND	10		µg/L	1	11/25/2014 4:23:31 PM	R22805
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Bromoform	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Bromomethane	ND	3.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
2-Butanone	ND	10		µg/L	1	11/25/2014 4:23:31 PM	R22805
Carbon disulfide	ND	10		µg/L	1	11/25/2014 4:23:31 PM	R22805
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Chloroethane	ND	2.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Chloroform	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Chloromethane	ND	3.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 9:30:00 AM
Lab ID: 1411984-002
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
2-Hexanone	ND	10		µg/L	1	11/25/2014 4:23:31 PM	R22805
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 4:23:31 PM	R22805
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Styrene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 4:23:31 PM	R22805
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 4:23:31 PM	R22805
Surr: 1,2-Dichloroethane-d4	87.3	70-130		%REC	1	11/25/2014 4:23:31 PM	R22805
Surr: 4-Bromofluorobenzene	88.4	70-130		%REC	1	11/25/2014 4:23:31 PM	R22805
Surr: Dibromofluoromethane	99.3	70-130		%REC	1	11/25/2014 4:23:31 PM	R22805
Surr: Toluene-d8	91.3	70-130		%REC	1	11/25/2014 4:23:31 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 10:40:00 AM
Lab ID: 1411984-003
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	3.8	1.0		mg/L	1	11/25/2014 4:56:24 PM	16539
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2014 4:56:24 PM	16539
Surr: DNOP	109	59-141		%REC	1	11/25/2014 4:56:24 PM	16539
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.12	0.050		mg/L	1	11/26/2014 4:20:16 PM	R22836
Surr: BFB	91.1	80-120		%REC	1	11/26/2014 4:20:16 PM	R22836
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Acenaphthylene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Aniline	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Anthracene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Azobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Benz(a)anthracene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Benzo(a)pyrene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Benzo(b)fluoranthene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Benzo(g,h,i)perylene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Benzo(k)fluoranthene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Benzoic acid	ND	20		µg/L	1	12/2/2014 5:33:35 PM	16584
Benzyl alcohol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Bis(2-chloroethyl)ether	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4-Bromophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Butyl benzyl phthalate	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Carbazole	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4-Chloro-3-methylphenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4-Chloroaniline	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2-Chloronaphthalene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2-Chlorophenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Chrysene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Di-n-butyl phthalate	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Di-n-octyl phthalate	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Dibenz(a,h)anthracene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Dibenzofuran	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
1,2-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
1,3-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 10:40:00 AM
Lab ID: 1411984-003
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
3,3´-Dichlorobenzidine	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Diethyl phthalate	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Dimethyl phthalate	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2,4-Dichlorophenol	ND	20		µg/L	1	12/2/2014 5:33:35 PM	16584
2,4-Dimethylphenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	12/2/2014 5:33:35 PM	16584
2,4-Dinitrophenol	ND	20		µg/L	1	12/2/2014 5:33:35 PM	16584
2,4-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2,6-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Fluoranthene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Fluorene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Hexachlorobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Hexachlorobutadiene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Hexachlorocyclopentadiene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Hexachloroethane	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Isophorone	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
1-Methylnaphthalene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2-Methylnaphthalene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2-Methylphenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
3+4-Methylphenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
N-Nitrosodimethylamine	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
N-Nitrosodiphenylamine	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Naphthalene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2-Nitroaniline	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
3-Nitroaniline	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4-Nitroaniline	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Nitrobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2-Nitrophenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
4-Nitrophenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Pentachlorophenol	ND	20		µg/L	1	12/2/2014 5:33:35 PM	16584
Phenanthrene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Phenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Pyrene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Pyridine	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
1,2,4-Trichlorobenzene	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
2,4,5-Trichlorophenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 10:40:00 AM
Lab ID: 1411984-003
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	12/2/2014 5:33:35 PM	16584
Surr: 2-Fluorophenol	79.5	17.6-104		%REC	1	12/2/2014 5:33:35 PM	16584
Surr: Phenol-d5	63.8	17.7-89.9		%REC	1	12/2/2014 5:33:35 PM	16584
Surr: 2,4,6-Tribromophenol	95.2	16.3-122		%REC	1	12/2/2014 5:33:35 PM	16584
Surr: Nitrobenzene-d5	83.4	45.3-117		%REC	1	12/2/2014 5:33:35 PM	16584
Surr: 2-Fluorobiphenyl	89.8	43-113		%REC	1	12/2/2014 5:33:35 PM	16584
Surr: 4-Terphenyl-d14	98.4	47.6-122		%REC	1	12/2/2014 5:33:35 PM	16584
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	2.8	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Toluene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Ethylbenzene	2.9	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Methyl tert-butyl ether (MTBE)	7.4	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2,4-Trimethylbenzene	4.6	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,3,5-Trimethylbenzene	1.5	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Naphthalene	5.5	2.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1-Methylnaphthalene	8.8	4.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
2-Methylnaphthalene	9.8	4.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Acetone	ND	10		µg/L	1	11/25/2014 4:51:02 PM	R22805
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Bromoform	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Bromomethane	ND	3.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
2-Butanone	ND	10		µg/L	1	11/25/2014 4:51:02 PM	R22805
Carbon disulfide	ND	10		µg/L	1	11/25/2014 4:51:02 PM	R22805
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Chloroethane	ND	2.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Chloroform	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Chloromethane	ND	3.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 10:40:00 AM
Lab ID: 1411984-003
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
2-Hexanone	ND	10		µg/L	1	11/25/2014 4:51:02 PM	R22805
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
4-Isopropyltoluene	1.4	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 4:51:02 PM	R22805
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Styrene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Trichloroethene (TCE)	1.1	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 4:51:02 PM	R22805
Xylenes, Total	3.1	1.5		µg/L	1	11/25/2014 4:51:02 PM	R22805
Surr: 1,2-Dichloroethane-d4	78.5	70-130		%REC	1	11/25/2014 4:51:02 PM	R22805
Surr: 4-Bromofluorobenzene	87.7	70-130		%REC	1	11/25/2014 4:51:02 PM	R22805
Surr: Dibromofluoromethane	89.5	70-130		%REC	1	11/25/2014 4:51:02 PM	R22805
Surr: Toluene-d8	91.0	70-130		%REC	1	11/25/2014 4:51:02 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 11:55:00 AM
Lab ID: 1411984-004
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/25/2014 5:26:53 PM	16539
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2014 5:26:53 PM	16539
Surr: DNOP	103	59-141		%REC	1	11/25/2014 5:26:53 PM	16539
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	8.7	0.50		mg/L	10	11/26/2014 5:14:34 PM	R22836
Surr: BFB	131	80-120	S	%REC	10	11/26/2014 5:14:34 PM	R22836
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Acenaphthylene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Aniline	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Anthracene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Azobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Benz(a)anthracene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Benzo(a)pyrene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Benzo(b)fluoranthene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Benzo(g,h,i)perylene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Benzo(k)fluoranthene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Benzoic acid	ND	20		µg/L	1	12/2/2014 6:01:08 PM	16584
Benzyl alcohol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Bis(2-chloroethyl)ether	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4-Bromophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Butyl benzyl phthalate	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Carbazole	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4-Chloro-3-methylphenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4-Chloroaniline	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2-Chloronaphthalene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2-Chlorophenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Chrysene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Di-n-butyl phthalate	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Di-n-octyl phthalate	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Dibenz(a,h)anthracene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Dibenzofuran	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
1,2-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
1,3-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 11:55:00 AM
Lab ID: 1411984-004
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
3,3´-Dichlorobenzidine	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Diethyl phthalate	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Dimethyl phthalate	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2,4-Dichlorophenol	ND	20		µg/L	1	12/2/2014 6:01:08 PM	16584
2,4-Dimethylphenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	12/2/2014 6:01:08 PM	16584
2,4-Dinitrophenol	ND	20		µg/L	1	12/2/2014 6:01:08 PM	16584
2,4-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2,6-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Fluoranthene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Fluorene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Hexachlorobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Hexachlorobutadiene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Hexachlorocyclopentadiene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Hexachloroethane	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Isophorone	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
1-Methylnaphthalene	50	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2-Methylnaphthalene	56	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2-Methylphenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
3+4-Methylphenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
N-Nitrosodimethylamine	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
N-Nitrosodiphenylamine	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Naphthalene	270	20		µg/L	2	12/3/2014 9:31:07 AM	16584
2-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
3-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Nitrobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2-Nitrophenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
4-Nitrophenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Pentachlorophenol	ND	20		µg/L	1	12/2/2014 6:01:08 PM	16584
Phenanthrene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Phenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Pyrene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Pyridine	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
1,2,4-Trichlorobenzene	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
2,4,5-Trichlorophenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 11:55:00 AM
Lab ID: 1411984-004
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4,6-Trichlorophenol	ND	10		µg/L	1	12/2/2014 6:01:08 PM	16584
Surr: 2-Fluorophenol	86.3	17.6-104		%REC	1	12/2/2014 6:01:08 PM	16584
Surr: Phenol-d5	59.5	17.7-89.9		%REC	1	12/2/2014 6:01:08 PM	16584
Surr: 2,4,6-Tribromophenol	102	16.3-122		%REC	1	12/2/2014 6:01:08 PM	16584
Surr: Nitrobenzene-d5	86.4	45.3-117		%REC	1	12/2/2014 6:01:08 PM	16584
Surr: 2-Fluorobiphenyl	98.0	43-113		%REC	1	12/2/2014 6:01:08 PM	16584
Surr: 4-Terphenyl-d14	108	47.6-122		%REC	1	12/2/2014 6:01:08 PM	16584
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	140	20		µg/L	20	11/26/2014 11:21:16 AM	R22841
Toluene	200	20		µg/L	20	11/26/2014 11:21:16 AM	R22841
Ethylbenzene	9.3	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Methyl tert-butyl ether (MTBE)	27	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2,4-Trimethylbenzene	510	20		µg/L	20	11/26/2014 11:21:16 AM	R22841
1,3,5-Trimethylbenzene	140	20		µg/L	20	11/26/2014 11:21:16 AM	R22841
1,2-Dichloroethane (EDC)	17	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2-Dibromoethane (EDB)	1.5	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Naphthalene	350	40		µg/L	20	11/26/2014 11:21:16 AM	R22841
1-Methylnaphthalene	47	4.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
2-Methylnaphthalene	84	4.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Acetone	ND	10		µg/L	1	11/25/2014 5:18:29 PM	R22805
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Bromoform	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Bromomethane	ND	3.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
2-Butanone	ND	10		µg/L	1	11/25/2014 5:18:29 PM	R22805
Carbon disulfide	ND	10		µg/L	1	11/25/2014 5:18:29 PM	R22805
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Chloroethane	ND	2.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Chloroform	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Chloromethane	ND	3.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 11:55:00 AM
Lab ID: 1411984-004
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1-Dichloroethane	34	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1-Dichloroethene	210	20		µg/L	20	11/26/2014 11:21:16 AM	R22841
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
2-Hexanone	ND	10		µg/L	1	11/25/2014 5:18:29 PM	R22805
Isopropylbenzene	78	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
4-Isopropyltoluene	4.8	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 5:18:29 PM	R22805
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
n-Butylbenzene	26	3.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
n-Propylbenzene	82	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
sec-Butylbenzene	11	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Styrene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,1,2-Trichloroethane	1.7	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Trichloroethene (TCE)	300	20		µg/L	20	11/26/2014 11:21:16 AM	R22841
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 5:18:29 PM	R22805
Xylenes, Total	1300	30		µg/L	20	11/26/2014 11:21:16 AM	R22841
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%REC	1	11/25/2014 5:18:29 PM	R22805
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	1	11/25/2014 5:18:29 PM	R22805
Surr: Dibromofluoromethane	83.3	70-130		%REC	1	11/25/2014 5:18:29 PM	R22805
Surr: Toluene-d8	90.9	70-130		%REC	1	11/25/2014 5:18:29 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 12:40:00 PM
Lab ID: 1411984-005
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	3.3	1.0		mg/L	1	11/25/2014 5:57:22 PM	16539
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2014 5:57:22 PM	16539
Surr: DNOP	104	59-141		%REC	1	11/25/2014 5:57:22 PM	16539
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.6	0.25		mg/L	5	11/26/2014 6:36:38 PM	R22836
Surr: BFB	91.3	80-120		%REC	5	11/26/2014 6:36:38 PM	R22836
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Acenaphthylene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Aniline	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Anthracene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Azobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Benz(a)anthracene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Benzo(a)pyrene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Benzo(b)fluoranthene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Benzo(g,h,i)perylene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Benzo(k)fluoranthene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Benzoic acid	ND	20		µg/L	1	12/2/2014 6:28:36 PM	16584
Benzyl alcohol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Bis(2-chloroethyl)ether	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4-Bromophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Butyl benzyl phthalate	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Carbazole	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4-Chloro-3-methylphenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4-Chloroaniline	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2-Chloronaphthalene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2-Chlorophenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Chrysene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Di-n-butyl phthalate	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Di-n-octyl phthalate	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Dibenz(a,h)anthracene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Dibenzofuran	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
1,2-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
1,3-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 12:40:00 PM
Lab ID: 1411984-005
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
3,3´-Dichlorobenzidine	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Diethyl phthalate	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Dimethyl phthalate	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2,4-Dichlorophenol	ND	20		µg/L	1	12/2/2014 6:28:36 PM	16584
2,4-Dimethylphenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	12/2/2014 6:28:36 PM	16584
2,4-Dinitrophenol	ND	20		µg/L	1	12/2/2014 6:28:36 PM	16584
2,4-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2,6-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Fluoranthene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Fluorene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Hexachlorobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Hexachlorobutadiene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Hexachlorocyclopentadiene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Hexachloroethane	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Isophorone	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
1-Methylnaphthalene	34	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2-Methylnaphthalene	45	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2-Methylphenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
3+4-Methylphenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
N-Nitrosodimethylamine	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
N-Nitrosodiphenylamine	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Naphthalene	36	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
3-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Nitrobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2-Nitrophenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
4-Nitrophenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Pentachlorophenol	ND	20		µg/L	1	12/2/2014 6:28:36 PM	16584
Phenanthrene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Phenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Pyrene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Pyridine	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
1,2,4-Trichlorobenzene	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
2,4,5-Trichlorophenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 12:40:00 PM
Lab ID: 1411984-005
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
2,4,6-Trichlorophenol	ND	10		µg/L	1	12/2/2014 6:28:36 PM	16584
Surr: 2-Fluorophenol	72.7	17.6-104		%REC	1	12/2/2014 6:28:36 PM	16584
Surr: Phenol-d5	59.1	17.7-89.9		%REC	1	12/2/2014 6:28:36 PM	16584
Surr: 2,4,6-Tribromophenol	96.2	16.3-122		%REC	1	12/2/2014 6:28:36 PM	16584
Surr: Nitrobenzene-d5	83.0	45.3-117		%REC	1	12/2/2014 6:28:36 PM	16584
Surr: 2-Fluorobiphenyl	99.1	43-113		%REC	1	12/2/2014 6:28:36 PM	16584
Surr: 4-Terphenyl-d14	100	47.6-122		%REC	1	12/2/2014 6:28:36 PM	16584
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	39	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Toluene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Ethylbenzene	52	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Methyl tert-butyl ether (MTBE)	66	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2,4-Trimethylbenzene	120	10		µg/L	10	11/26/2014 11:48:52 AM	R22841
1,3,5-Trimethylbenzene	50	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Naphthalene	40	2.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1-Methylnaphthalene	38	4.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
2-Methylnaphthalene	59	4.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Acetone	ND	10		µg/L	1	11/25/2014 6:13:36 PM	R22805
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Bromoform	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Bromomethane	ND	3.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
2-Butanone	ND	10		µg/L	1	11/25/2014 6:13:36 PM	R22805
Carbon disulfide	ND	10		µg/L	1	11/25/2014 6:13:36 PM	R22805
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Chloroethane	ND	2.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Chloroform	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Chloromethane	ND	3.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 12:40:00 PM
Lab ID: 1411984-005
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
2-Hexanone	ND	10		µg/L	1	11/25/2014 6:13:36 PM	R22805
Isopropylbenzene	5.1	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 6:13:36 PM	R22805
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
n-Butylbenzene	6.1	3.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
n-Propylbenzene	28	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
sec-Butylbenzene	2.7	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Styrene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 6:13:36 PM	R22805
Xylenes, Total	73	1.5		µg/L	1	11/25/2014 6:13:36 PM	R22805
Surr: 1,2-Dichloroethane-d4	77.7	70-130		%REC	1	11/25/2014 6:13:36 PM	R22805
Surr: 4-Bromofluorobenzene	84.2	70-130		%REC	1	11/25/2014 6:13:36 PM	R22805
Surr: Dibromofluoromethane	86.9	70-130		%REC	1	11/25/2014 6:13:36 PM	R22805
Surr: Toluene-d8	88.8	70-130		%REC	1	11/25/2014 6:13:36 PM	R22805

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 1:30:00 PM
Lab ID: 1411984-006
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	6.8	1.0		mg/L	1	11/25/2014 6:27:26 PM	16539
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/25/2014 6:27:26 PM	16539
Surr: DNOP	92.2	59-141		%REC	1	11/25/2014 6:27:26 PM	16539
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	25	5.0		mg/L	100	11/26/2014 7:03:58 PM	R22836
Surr: BFB	91.6	80-120		%REC	100	11/26/2014 7:03:58 PM	R22836
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**JDC**
Acenaphthene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Acenaphthylene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Aniline	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Anthracene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Azobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Benz(a)anthracene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Benzo(a)pyrene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Benzo(b)fluoranthene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Benzo(g,h,i)perylene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Benzo(k)fluoranthene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Benzoic acid	ND	20		µg/L	1	12/2/2014 6:56:01 PM	16584
Benzyl alcohol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Bis(2-chloroethyl)ether	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4-Bromophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Butyl benzyl phthalate	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Carbazole	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4-Chloro-3-methylphenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4-Chloroaniline	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2-Chloronaphthalene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2-Chlorophenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Chrysene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Di-n-butyl phthalate	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Di-n-octyl phthalate	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Dibenz(a,h)anthracene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Dibenzofuran	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
1,2-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
1,3-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584

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

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 1:30:00 PM
Lab ID: 1411984-006
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
1,4-Dichlorobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
3,3´-Dichlorobenzidine	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Diethyl phthalate	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Dimethyl phthalate	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2,4-Dichlorophenol	ND	20		µg/L	1	12/2/2014 6:56:01 PM	16584
2,4-Dimethylphenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	12/2/2014 6:56:01 PM	16584
2,4-Dinitrophenol	ND	20		µg/L	1	12/2/2014 6:56:01 PM	16584
2,4-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2,6-Dinitrotoluene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Fluoranthene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Fluorene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Hexachlorobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Hexachlorobutadiene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Hexachlorocyclopentadiene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Hexachloroethane	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Isophorone	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
1-Methylnaphthalene	160	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2-Methylnaphthalene	230	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2-Methylphenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
3+4-Methylphenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
N-Nitrosodimethylamine	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
N-Nitrosodiphenylamine	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Naphthalene	280	20		µg/L	2	12/3/2014 9:58:32 AM	16584
2-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
3-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4-Nitroaniline	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Nitrobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2-Nitrophenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
4-Nitrophenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Pentachlorophenol	ND	20		µg/L	1	12/2/2014 6:56:01 PM	16584
Phenanthrene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Phenol	15	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Pyrene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Pyridine	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
1,2,4-Trichlorobenzene	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
2,4,5-Trichlorophenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 1:30:00 PM
Lab ID: 1411984-006
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**	
2,4,6-Trichlorophenol	ND	10		µg/L	1	12/2/2014 6:56:01 PM	16584
Surr: 2-Fluorophenol	52.4	17.6-104		%REC	1	12/2/2014 6:56:01 PM	16584
Surr: Phenol-d5	50.2	17.7-89.9		%REC	1	12/2/2014 6:56:01 PM	16584
Surr: 2,4,6-Tribromophenol	73.8	16.3-122		%REC	1	12/2/2014 6:56:01 PM	16584
Surr: Nitrobenzene-d5	64.7	45.3-117		%REC	1	12/2/2014 6:56:01 PM	16584
Surr: 2-Fluorobiphenyl	68.9	43-113		%REC	1	12/2/2014 6:56:01 PM	16584
Surr: 4-Terphenyl-d14	75.2	47.6-122		%REC	1	12/2/2014 6:56:01 PM	16584
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	8400	200		µg/L	200	11/26/2014 12:16:34 PM	R22841
Toluene	32	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Ethylbenzene	1500	200		µg/L	200	11/26/2014 12:16:34 PM	R22841
Methyl tert-butyl ether (MTBE)	7200	200		µg/L	200	11/26/2014 12:16:34 PM	R22841
1,2,4-Trimethylbenzene	270	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,3,5-Trimethylbenzene	62	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Naphthalene	590	20		µg/L	10	11/25/2014 7:08:09 PM	R22805
1-Methylnaphthalene	340	40		µg/L	10	11/25/2014 7:08:09 PM	R22805
2-Methylnaphthalene	530	40		µg/L	10	11/25/2014 7:08:09 PM	R22805
Acetone	ND	100		µg/L	10	11/25/2014 7:08:09 PM	R22805
Bromobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Bromodichloromethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Bromoform	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Bromomethane	ND	30		µg/L	10	11/25/2014 7:08:09 PM	R22805
2-Butanone	ND	100		µg/L	10	11/25/2014 7:08:09 PM	R22805
Carbon disulfide	ND	100		µg/L	10	11/25/2014 7:08:09 PM	R22805
Carbon Tetrachloride	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Chlorobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Chloroethane	ND	20		µg/L	10	11/25/2014 7:08:09 PM	R22805
Chloroform	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Chloromethane	ND	30		µg/L	10	11/25/2014 7:08:09 PM	R22805
2-Chlorotoluene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
4-Chlorotoluene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
cis-1,2-DCE	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/25/2014 7:08:09 PM	R22805
Dibromochloromethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Dibromomethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2-Dichlorobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: Hydrocarbon Seep
Collection Date: 11/21/2014 1:30:00 PM
Lab ID: 1411984-006
Matrix: AQUEOUS
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichlorobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,4-Dichlorobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Dichlorodifluoromethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1-Dichloroethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1-Dichloroethene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2-Dichloropropane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,3-Dichloropropane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
2,2-Dichloropropane	ND	20		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1-Dichloropropene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Hexachlorobutadiene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
2-Hexanone	ND	100		µg/L	10	11/25/2014 7:08:09 PM	R22805
Isopropylbenzene	41	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
4-Isopropyltoluene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
4-Methyl-2-pentanone	ND	100		µg/L	10	11/25/2014 7:08:09 PM	R22805
Methylene Chloride	ND	30		µg/L	10	11/25/2014 7:08:09 PM	R22805
n-Butylbenzene	ND	30		µg/L	10	11/25/2014 7:08:09 PM	R22805
n-Propylbenzene	99	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
sec-Butylbenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Styrene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
tert-Butylbenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/25/2014 7:08:09 PM	R22805
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
trans-1,2-DCE	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1,1-Trichloroethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,1,2-Trichloroethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Trichloroethene (TCE)	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Trichlorofluoromethane	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
1,2,3-Trichloropropane	ND	20		µg/L	10	11/25/2014 7:08:09 PM	R22805
Vinyl chloride	ND	10		µg/L	10	11/25/2014 7:08:09 PM	R22805
Xylenes, Total	560	15		µg/L	10	11/25/2014 7:08:09 PM	R22805
Surr: 1,2-Dichloroethane-d4	84.3	70-130		%REC	10	11/25/2014 7:08:09 PM	R22805
Surr: 4-Bromofluorobenzene	87.9	70-130		%REC	10	11/25/2014 7:08:09 PM	R22805
Surr: Dibromofluoromethane	93.1	70-130		%REC	10	11/25/2014 7:08:09 PM	R22805
Surr: Toluene-d8	89.0	70-130		%REC	10	11/25/2014 7:08:09 PM	R22805

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1411984-007
Matrix: TRIP BLANK
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/26/2014 7:31:15 PM	R22836
Surr: BFB	89.8	80-120		%REC	1	11/26/2014 7:31:15 PM	R22836
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Toluene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Naphthalene	ND	2.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Acetone	ND	10		µg/L	1	11/25/2014 7:35:39 PM	R22805
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Bromoform	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Bromomethane	ND	3.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
2-Butanone	ND	10		µg/L	1	11/25/2014 7:35:39 PM	R22805
Carbon disulfide	ND	10		µg/L	1	11/25/2014 7:35:39 PM	R22805
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Chloroethane	ND	2.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Chloroform	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Chloromethane	ND	3.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Hydrocarbon Seep
Collection Date:
Lab ID: 1411984-007
Matrix: TRIP BLANK
Received Date: 11/22/2014 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
2-Hexanone	ND	10		µg/L	1	11/25/2014 7:35:39 PM	R22805
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 7:35:39 PM	R22805
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Styrene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 7:35:39 PM	R22805
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 7:35:39 PM	R22805
Surr: 1,2-Dichloroethane-d4	82.3	70-130		%REC	1	11/25/2014 7:35:39 PM	R22805
Surr: 4-Bromofluorobenzene	85.7	70-130		%REC	1	11/25/2014 7:35:39 PM	R22805
Surr: Dibromofluoromethane	95.6	70-130		%REC	1	11/25/2014 7:35:39 PM	R22805
Surr: Toluene-d8	92.6	70-130		%REC	1	11/25/2014 7:35:39 PM	R22805

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**MB-16539**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**PBW**	Batch ID:	**16539**	RunNo:	**22772**					
Prep Date:	**11/24/2014**	Analysis Date:	**11/25/2014**	SeqNo:	**672635**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		101	59	141			

Sample ID	**LCS-16539**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**					
Client ID:	**LCSW**	Batch ID:	**16539**	RunNo:	**22764**					
Prep Date:	**11/24/2014**	Analysis Date:	**11/25/2014**	SeqNo:	**672636**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.9	1.0	5.000	0	117	69.7	142			
Surr: DNOP	0.62		0.5000		123	59	141			

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.
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R22836** RunNo: **22836**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **673913** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.5	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R22836** RunNo: **22836**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **673914** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	89.8	80	120			
Surr: BFB	18		20.00		92.4	80	120			

Sample ID **1411984-004BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-37** Batch ID: **R22836** RunNo: **22836**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **673928** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	0.50	5.000	8.746	103	70.4	127			
Surr: BFB	280		200.0		141	80	120			S

Sample ID **1411984-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-37** Batch ID: **R22836** RunNo: **22836**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **673929** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	0.50	5.000	8.746	98.4	70.4	127	1.71	20	
Surr: BFB	280		200.0		140	80	120	0	0	S

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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22805**	RunNo: **22805**			
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672998**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22805**	RunNo: **22805**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672998** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.3	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.9	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.4	70	130			
Surr: Toluene-d8	9.0		10.00		89.7	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R22805**	RunNo: **22805**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **673000** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	22	1.0	20.00	0	108	80	120			
Chlorobenzene	22	1.0	20.00	0	109	70	130			

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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22805** RunNo: **22805**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **673000** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	113	82.6	131			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		86.8	70	130			
Surr: Dibromofluoromethane	8.1		10.00		80.6	70	130			
Surr: Toluene-d8	8.8		10.00		88.5	70	130			

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22841** RunNo: **22841**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **674028** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Naphthalene	ND	2.0								
1,1-Dichloroethene	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.7	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.1	70	130			
Surr: Toluene-d8	9.3		10.00		93.4	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22841** RunNo: **22841**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **674030** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	22	1.0	20.00	0	108	80	120			
1,1-Dichloroethene	22	1.0	20.00	0	110	82.6	131			
Trichloroethene (TCE)	20	1.0	20.00	0	99.1	70	130			
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.7	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.3	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.5	70	130			
Surr: Toluene-d8	9.2		10.00		91.8	70	130			

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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-16584**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16584**	RunNo: **22880**			
Prep Date: **11/26/2014**	Analysis Date: **12/2/2014**	SeqNo: **675850**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-16584**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16584**	RunNo: **22880**			
Prep Date: **11/26/2014**	Analysis Date: **12/2/2014**	SeqNo: **675850**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	160		200.0		80.0	17.6	104			
Surr: Phenol-d5	160		200.0		81.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	160		200.0		78.0	16.3	122			
Surr: Nitrobenzene-d5	77		100.0		76.6	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		80.2	43	113			
Surr: 4-Terphenyl-d14	89		100.0		89.1	47.6	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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-16584** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **16584** RunNo: **22880**
Prep Date: **11/26/2014** Analysis Date: **12/2/2014** SeqNo: **675851** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	74	10	100.0	0	73.5	47.9	114			
4-Chloro-3-methylphenol	160	10	200.0	0	82.2	51.7	122			
2-Chlorophenol	150	10	200.0	0	73.6	40.7	113			
1,4-Dichlorobenzene	72	10	100.0	0	72.5	39.6	99.9			
2,4-Dinitrotoluene	60	10	100.0	0	60.0	40.8	113			
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.2	51.2	111			
4-Nitrophenol	150	10	200.0	0	73.4	15.7	86.9			
Pentachlorophenol	130	20	200.0	0	65.7	21.6	104			
Phenol	170	10	200.0	0	83.2	28.6	71.7			S
Pyrene	74	10	100.0	0	73.7	54.2	128			
1,2,4-Trichlorobenzene	68	10	100.0	0	67.6	40.9	101			
Surr: 2-Fluorophenol	150		200.0		75.4	17.6	104			
Surr: Phenol-d5	160		200.0		78.8	17.7	89.9			
Surr: 2,4,6-Tribromophenol	150		200.0		75.4	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		70.3	45.3	117			
Surr: 2-Fluorobiphenyl	72		100.0		71.9	43	113			
Surr: 4-Terphenyl-d14	86		100.0		85.6	47.6	122			

Sample ID **lcsd-16584** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **16584** RunNo: **22880**
Prep Date: **11/26/2014** Analysis Date: **12/2/2014** SeqNo: **675852** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	74	10	100.0	0	73.7	47.9	114	0.163	27.2	
4-Chloro-3-methylphenol	160	10	200.0	0	80.6	51.7	122	1.93	25.9	
2-Chlorophenol	150	10	200.0	0	73.0	40.7	113	0.819	22.5	
1,4-Dichlorobenzene	69	10	100.0	0	68.7	39.6	99.9	5.30	24.6	
2,4-Dinitrotoluene	72	10	100.0	0	71.9	40.8	113	18.0	25.3	
N-Nitrosodi-n-propylamine	78	10	100.0	0	77.7	51.2	111	6.74	23.6	
4-Nitrophenol	170	10	200.0	0	85.8	15.7	86.9	15.7	34.7	
Pentachlorophenol	160	20	200.0	0	78.8	21.6	104	18.1	32.8	
Phenol	160	10	200.0	0	80.6	28.6	71.7	3.21	25.5	S
Pyrene	73	10	100.0	0	73.5	54.2	128	0.326	31.4	
1,2,4-Trichlorobenzene	62	10	100.0	0	61.6	40.9	101	9.35	25.9	
Surr: 2-Fluorophenol	130		200.0		67.0	17.6	104	0	0	
Surr: Phenol-d5	140		200.0		70.0	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	160		200.0		79.8	16.3	122	0	0	
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	67		100.0		67.1	43	113	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.
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#: **1411984**
04-Dec-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**lcsd-16584**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**16584**	RunNo:	**22880**
Prep Date:	**11/26/2014**	Analysis Date:	**12/2/2014**	SeqNo:	**675852** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	85		100.0		85.5	47.6	122	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1411984** RcptNo: **1**

Received by/date: 11/22/14

Logged By: **Lindsay Mangin** **11/22/2014 8:37:00 AM**

Completed By: **Lindsay Mangin** **11/22/2014 10:09:42 AM**

Reviewed By: 11/24/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.8	Good	Yes			

Chain-of-Custody Record

Client: WNR - GALLUP REFINERY

Mailing Address: ROUTE 3 BOX 7
GALLUP NM 87301

Phone #: 505-722-0231

email or Fax#: CHERYL.JOHNSON@WNR.COM

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: HYDROCARBON SEEP

Project #:

Project Manager: CHERYL JOHNSON

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411984	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/21/14	0830	GW	MKTF-44	7	HCL/NEAT	-001			✓							✓	✓					
	0930	GW	MKTF-40			-002			✓							✓	✓					
	1040	GW	MKTF-38			-003			✓							✓	✓					
	1155	GW	MKTF-37			-004			✓							✓	✓					
	1240	GW	MKTF-35			-005			✓							✓	✓					
	1330	GW	MKTF-36			-006			✓							✓	✓					
	—	W	TRIP BLANK	3	HCL	-007			✓							✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/22/14	0837	[illegible]	[illegible]	11/22/14	0837
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

November 25, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Hydrocarbon Seep OrderNo.: 1411731

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/18/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1411731**
Date Reported: **11/25/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 8:20:00 AM
Lab ID: 1411731-001
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/19/2014 6:49:23 PM	16462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 6:49:23 PM	16462
Surr: DNOP	103	59-141		%REC	1	11/19/2014 6:49:23 PM	16462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/19/2014 6:37:43 PM	R22638
Surr: BFB	92.3	80-120		%REC	1	11/19/2014 6:37:43 PM	R22638
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Acenaphthylene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Aniline	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Anthracene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Azobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Benz(a)anthracene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Benzoic acid	ND	20		µg/L	1	11/20/2014 3:43:36 PM	16481
Benzyl alcohol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Carbazole	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4-Chloroaniline	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2-Chlorophenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Chrysene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Dibenzofuran	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 8:20:00 AM
Lab ID: 1411731-001
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Diethyl phthalate	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Dimethyl phthalate	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2,4-Dichlorophenol	ND	20		µg/L	1	11/20/2014 3:43:36 PM	16481
2,4-Dimethylphenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/20/2014 3:43:36 PM	16481
2,4-Dinitrophenol	ND	20		µg/L	1	11/20/2014 3:43:36 PM	16481
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Fluoranthene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Fluorene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Hexachlorobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Hexachloroethane	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Isophorone	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
1-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2-Methylphenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
3+4-Methylphenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Naphthalene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2-Nitroaniline	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
3-Nitroaniline	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4-Nitroaniline	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Nitrobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2-Nitrophenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
4-Nitrophenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Pentachlorophenol	ND	20		µg/L	1	11/20/2014 3:43:36 PM	16481
Phenanthrene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Phenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Pyrene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Pyridine	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 8:20:00 AM
Lab ID: 1411731-001
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/20/2014 3:43:36 PM	16481
Surr: 2-Fluorophenol	30.5	17.6-104		%REC	1	11/20/2014 3:43:36 PM	16481
Surr: Phenol-d5	29.8	17.7-89.9		%REC	1	11/20/2014 3:43:36 PM	16481
Surr: 2,4,6-Tribromophenol	30.6	16.3-122		%REC	1	11/20/2014 3:43:36 PM	16481
Surr: Nitrobenzene-d5	81.1	45.3-117		%REC	1	11/20/2014 3:43:36 PM	16481
Surr: 2-Fluorobiphenyl	74.3	43-113		%REC	1	11/20/2014 3:43:36 PM	16481
Surr: 4-Terphenyl-d14	80.8	47.6-122		%REC	1	11/20/2014 3:43:36 PM	16481
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Toluene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Ethylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Naphthalene	ND	2.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Acetone	ND	10		µg/L	1	11/22/2014 7:34:21 AM	R22714
Bromobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Bromoform	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Bromomethane	ND	10		µg/L	1	11/22/2014 7:34:21 AM	R22714
2-Butanone	ND	10		µg/L	1	11/22/2014 7:34:21 AM	R22714
Carbon disulfide	ND	10		µg/L	1	11/22/2014 7:34:21 AM	R22714
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Chlorobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Chloroethane	ND	2.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Chloroform	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Chloromethane	ND	3.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Dibromomethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 8:20:00 AM
Lab ID: 1411731-001
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
2-Hexanone	ND	10		µg/L	1	11/22/2014 7:34:21 AM	R22714
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
4-Isopropyltoluene	3.6	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2014 7:34:21 AM	R22714
Methylene Chloride	ND	3.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Styrene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Vinyl chloride	ND	1.0		µg/L	1	11/22/2014 7:34:21 AM	R22714
Xylenes, Total	ND	1.5		µg/L	1	11/22/2014 7:34:21 AM	R22714
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	1	11/22/2014 7:34:21 AM	R22714
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	11/22/2014 7:34:21 AM	R22714
Surr: Dibromofluoromethane	104	70-130		%REC	1	11/22/2014 7:34:21 AM	R22714
Surr: Toluene-d8	100	70-130		%REC	1	11/22/2014 7:34:21 AM	R22714

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:00:00 AM
Lab ID: 1411731-002
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	44	1.0		mg/L	1	11/19/2014 7:10:32 PM	16462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 7:10:32 PM	16462
Surr: DNOP	97.2	59-141		%REC	1	11/19/2014 7:10:32 PM	16462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	11/21/2014 12:06:22 PM	R22716
Surr: BFB	87.0	80-120		%REC	10	11/21/2014 12:06:22 PM	R22716
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Acenaphthylene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Aniline	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Anthracene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Azobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Benz(a)anthracene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Benzoic acid	ND	20		µg/L	1	11/20/2014 5:07:01 PM	16481
Benzyl alcohol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Bis(2-ethylhexyl)phthalate	13	10	B	µg/L	1	11/20/2014 5:07:01 PM	16481
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Carbazole	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
4-Chloroaniline	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2-Chlorophenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Chrysene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Dibenzofuran	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:00:00 AM
Lab ID: 1411731-002
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Diethyl phthalate	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Dimethyl phthalate	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2,4-Dichlorophenol	ND	20		µg/L	1	11/20/2014 5:07:01 PM	16481
2,4-Dimethylphenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/20/2014 5:07:01 PM	16481
2,4-Dinitrophenol	ND	20		µg/L	1	11/20/2014 5:07:01 PM	16481
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Fluoranthene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Fluorene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Hexachlorobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Hexachloroethane	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Isophorone	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
1-Methylnaphthalene	72	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2-Methylphenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
3+4-Methylphenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Naphthalene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2-Nitroaniline	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
3-Nitroaniline	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
4-Nitroaniline	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Nitrobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2-Nitrophenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
4-Nitrophenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Pentachlorophenol	ND	20		µg/L	1	11/20/2014 5:07:01 PM	16481
Phenanthrene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Phenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Pyrene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Pyridine	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:00:00 AM
Lab ID: 1411731-002
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/20/2014 5:07:01 PM	16481
Surr: 2-Fluorophenol	68.9	17.6-104		%REC	1	11/20/2014 5:07:01 PM	16481
Surr: Phenol-d5	53.9	17.7-89.9		%REC	1	11/20/2014 5:07:01 PM	16481
Surr: 2,4,6-Tribromophenol	1.72	16.3-122	S	%REC	1	11/20/2014 5:07:01 PM	16481
Surr: Nitrobenzene-d5	80.1	45.3-117		%REC	1	11/20/2014 5:07:01 PM	16481
Surr: 2-Fluorobiphenyl	61.3	43-113		%REC	1	11/20/2014 5:07:01 PM	16481
Surr: 4-Terphenyl-d14	78.6	47.6-122		%REC	1	11/20/2014 5:07:01 PM	16481
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	12	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Toluene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Ethylbenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2,4-Trimethylbenzene	27	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Naphthalene	35	20		µg/L	10	11/22/2014 8:00:58 AM	R22714
1-Methylnaphthalene	73	40		µg/L	10	11/22/2014 8:00:58 AM	R22714
2-Methylnaphthalene	58	40		µg/L	10	11/22/2014 8:00:58 AM	R22714
Acetone	ND	100		µg/L	10	11/22/2014 8:00:58 AM	R22714
Bromobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Bromodichloromethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Bromoform	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Bromomethane	ND	30		µg/L	10	11/22/2014 8:00:58 AM	R22714
2-Butanone	ND	100		µg/L	10	11/22/2014 8:00:58 AM	R22714
Carbon disulfide	ND	100		µg/L	10	11/22/2014 8:00:58 AM	R22714
Carbon Tetrachloride	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Chlorobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Chloroethane	ND	20		µg/L	10	11/22/2014 8:00:58 AM	R22714
Chloroform	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Chloromethane	ND	30		µg/L	10	11/22/2014 8:00:58 AM	R22714
2-Chlorotoluene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
4-Chlorotoluene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
cis-1,2-DCE	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/22/2014 8:00:58 AM	R22714
Dibromochloromethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Dibromomethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2-Dichlorobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:00:00 AM
Lab ID: 1411731-002
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,4-Dichlorobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Dichlorodifluoromethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1-Dichloroethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1-Dichloroethene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2-Dichloropropane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,3-Dichloropropane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
2,2-Dichloropropane	ND	20		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1-Dichloropropene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Hexachlorobutadiene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
2-Hexanone	ND	100		µg/L	10	11/22/2014 8:00:58 AM	R22714
Isopropylbenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
4-Isopropyltoluene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
4-Methyl-2-pentanone	ND	100		µg/L	10	11/22/2014 8:00:58 AM	R22714
Methylene Chloride	ND	30		µg/L	10	11/22/2014 8:00:58 AM	R22714
n-Butylbenzene	ND	30		µg/L	10	11/22/2014 8:00:58 AM	R22714
n-Propylbenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
sec-Butylbenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Styrene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
tert-Butylbenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/22/2014 8:00:58 AM	R22714
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
trans-1,2-DCE	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1,1-Trichloroethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,1,2-Trichloroethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Trichloroethene (TCE)	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Trichlorofluoromethane	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
1,2,3-Trichloropropane	ND	20		µg/L	10	11/22/2014 8:00:58 AM	R22714
Vinyl chloride	ND	10		µg/L	10	11/22/2014 8:00:58 AM	R22714
Xylenes, Total	56	15		µg/L	10	11/22/2014 8:00:58 AM	R22714
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	10	11/22/2014 8:00:58 AM	R22714
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	10	11/22/2014 8:00:58 AM	R22714
Surr: Dibromofluoromethane	96.0	70-130		%REC	10	11/22/2014 8:00:58 AM	R22714
Surr: Toluene-d8	101	70-130		%REC	10	11/22/2014 8:00:58 AM	R22714

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:45:00 AM
Lab ID: 1411731-003
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/19/2014 7:31:35 PM	16462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 7:31:35 PM	16462
Surr: DNOP	132	59-141		%REC	1	11/19/2014 7:31:35 PM	16462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/19/2014 7:32:53 PM	R22638
Surr: BFB	88.3	80-120		%REC	1	11/19/2014 7:32:53 PM	R22638
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Acenaphthylene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Aniline	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Anthracene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Azobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Benz(a)anthracene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Benzoic acid	ND	20		µg/L	1	11/20/2014 4:11:28 PM	16481
Benzyl alcohol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Bis(2-ethylhexyl)phthalate	14	10	B	µg/L	1	11/20/2014 4:11:28 PM	16481
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Carbazole	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
4-Chloroaniline	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2-Chlorophenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Chrysene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Dibenzofuran	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:45:00 AM
Lab ID: 1411731-003
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Diethyl phthalate	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Dimethyl phthalate	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2,4-Dichlorophenol	ND	20		µg/L	1	11/20/2014 4:11:28 PM	16481
2,4-Dimethylphenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/20/2014 4:11:28 PM	16481
2,4-Dinitrophenol	ND	20		µg/L	1	11/20/2014 4:11:28 PM	16481
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Fluoranthene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Fluorene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Hexachlorobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Hexachloroethane	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Isophorone	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
1-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2-Methylphenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
3+4-Methylphenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Naphthalene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2-Nitroaniline	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
3-Nitroaniline	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
4-Nitroaniline	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Nitrobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2-Nitrophenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
4-Nitrophenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Pentachlorophenol	ND	20		µg/L	1	11/20/2014 4:11:28 PM	16481
Phenanthrene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Phenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Pyrene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Pyridine	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:45:00 AM
Lab ID: 1411731-003
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/20/2014 4:11:28 PM	16481
Surr: 2-Fluorophenol	73.1	17.6-104		%REC	1	11/20/2014 4:11:28 PM	16481
Surr: Phenol-d5	57.2	17.7-89.9		%REC	1	11/20/2014 4:11:28 PM	16481
Surr: 2,4,6-Tribromophenol	81.0	16.3-122		%REC	1	11/20/2014 4:11:28 PM	16481
Surr: Nitrobenzene-d5	81.4	45.3-117		%REC	1	11/20/2014 4:11:28 PM	16481
Surr: 2-Fluorobiphenyl	77.9	43-113		%REC	1	11/20/2014 4:11:28 PM	16481
Surr: 4-Terphenyl-d14	94.4	47.6-122		%REC	1	11/20/2014 4:11:28 PM	16481
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Toluene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Ethylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2-Dichloroethane (EDC)	2.0	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Naphthalene	ND	2.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Acetone	ND	10		µg/L	1	11/22/2014 8:27:44 AM	R22714
Bromobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Bromoform	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Bromomethane	ND	3.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
2-Butanone	ND	10		µg/L	1	11/22/2014 8:27:44 AM	R22714
Carbon disulfide	ND	10		µg/L	1	11/22/2014 8:27:44 AM	R22714
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Chlorobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Chloroethane	ND	2.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Chloroform	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Chloromethane	ND	3.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Dibromomethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 9:45:00 AM
Lab ID: 1411731-003
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1-Dichloroethane	3.6	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1-Dichloroethene	3.8	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
2-Hexanone	ND	10		µg/L	1	11/22/2014 8:27:44 AM	R22714
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2014 8:27:44 AM	R22714
Methylene Chloride	ND	3.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Styrene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Vinyl chloride	ND	1.0		µg/L	1	11/22/2014 8:27:44 AM	R22714
Xylenes, Total	ND	1.5		µg/L	1	11/22/2014 8:27:44 AM	R22714
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	1	11/22/2014 8:27:44 AM	R22714
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	11/22/2014 8:27:44 AM	R22714
Surr: Dibromofluoromethane	90.9	70-130		%REC	1	11/22/2014 8:27:44 AM	R22714
Surr: Toluene-d8	103	70-130		%REC	1	11/22/2014 8:27:44 AM	R22714

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 11:15:00 AM
Lab ID: 1411731-004
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	15	1.0		mg/L	1	11/19/2014 7:52:48 PM	16462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 7:52:48 PM	16462
Surr: DNOP	107	59-141		%REC	1	11/19/2014 7:52:48 PM	16462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.39	0.25		mg/L	5	11/21/2014 3:17:45 PM	R22716
Surr: BFB	109	80-120		%REC	5	11/21/2014 3:17:45 PM	R22716
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Acenaphthylene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Aniline	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Anthracene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Azobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Benz(a)anthracene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Benzoic acid	ND	20		µg/L	1	11/20/2014 4:39:15 PM	16481
Benzyl alcohol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Bis(2-ethylhexyl)phthalate	12	10	B	µg/L	1	11/20/2014 4:39:15 PM	16481
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Carbazole	21	10		µg/L	1	11/20/2014 4:39:15 PM	16481
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
4-Chloroaniline	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2-Chlorophenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Chrysene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Dibenzofuran	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481

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Qualifiers:

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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 11:15:00 AM
Lab ID: 1411731-004
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Diethyl phthalate	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Dimethyl phthalate	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2,4-Dichlorophenol	ND	20		µg/L	1	11/20/2014 4:39:15 PM	16481
2,4-Dimethylphenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/20/2014 4:39:15 PM	16481
2,4-Dinitrophenol	ND	20		µg/L	1	11/20/2014 4:39:15 PM	16481
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Fluoranthene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Fluorene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Hexachlorobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Hexachloroethane	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Isophorone	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
1-Methylnaphthalene	79	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2-Methylphenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
3+4-Methylphenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Naphthalene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2-Nitroaniline	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
3-Nitroaniline	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
4-Nitroaniline	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Nitrobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2-Nitrophenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
4-Nitrophenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Pentachlorophenol	ND	20		µg/L	1	11/20/2014 4:39:15 PM	16481
Phenanthrene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Phenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Pyrene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Pyridine	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: Hydrocarbon Seep
Collection Date: 11/18/2014 11:15:00 AM
Lab ID: 1411731-004
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/20/2014 4:39:15 PM	16481
Surr: 2-Fluorophenol	69.4	17.6-104		%REC	1	11/20/2014 4:39:15 PM	16481
Surr: Phenol-d5	57.4	17.7-89.9		%REC	1	11/20/2014 4:39:15 PM	16481
Surr: 2,4,6-Tribromophenol	83.7	16.3-122		%REC	1	11/20/2014 4:39:15 PM	16481
Surr: Nitrobenzene-d5	83.3	45.3-117		%REC	1	11/20/2014 4:39:15 PM	16481
Surr: 2-Fluorobiphenyl	75.4	43-113		%REC	1	11/20/2014 4:39:15 PM	16481
Surr: 4-Terphenyl-d14	71.9	47.6-122		%REC	1	11/20/2014 4:39:15 PM	16481
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	20	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Toluene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Ethylbenzene	60	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2,4-Trimethylbenzene	43	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Naphthalene	120	10		µg/L	5	11/22/2014 8:54:27 AM	R22714
1-Methylnaphthalene	170	20		µg/L	5	11/22/2014 8:54:27 AM	R22714
2-Methylnaphthalene	130	20		µg/L	5	11/22/2014 8:54:27 AM	R22714
Acetone	ND	50		µg/L	5	11/22/2014 8:54:27 AM	R22714
Bromobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Bromodichloromethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Bromoform	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Bromomethane	ND	15		µg/L	5	11/22/2014 8:54:27 AM	R22714
2-Butanone	ND	50		µg/L	5	11/22/2014 8:54:27 AM	R22714
Carbon disulfide	ND	50		µg/L	5	11/22/2014 8:54:27 AM	R22714
Carbon Tetrachloride	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Chlorobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Chloroethane	ND	10		µg/L	5	11/22/2014 8:54:27 AM	R22714
Chloroform	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Chloromethane	ND	15		µg/L	5	11/22/2014 8:54:27 AM	R22714
2-Chlorotoluene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
4-Chlorotoluene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
cis-1,2-DCE	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	11/22/2014 8:54:27 AM	R22714
Dibromochloromethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Dibromomethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2-Dichlorobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714

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Qualifiers:

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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		

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Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,4-Dichlorobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Dichlorodifluoromethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1-Dichloroethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1-Dichloroethene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2-Dichloropropane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,3-Dichloropropane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
2,2-Dichloropropane	ND	10		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1-Dichloropropene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Hexachlorobutadiene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
2-Hexanone	ND	50		µg/L	5	11/22/2014 8:54:27 AM	R22714
Isopropylbenzene	15	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
4-Isopropyltoluene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
4-Methyl-2-pentanone	ND	50		µg/L	5	11/22/2014 8:54:27 AM	R22714
Methylene Chloride	ND	15		µg/L	5	11/22/2014 8:54:27 AM	R22714
n-Butylbenzene	ND	15		µg/L	5	11/22/2014 8:54:27 AM	R22714
n-Propylbenzene	19	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
sec-Butylbenzene	5.5	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Styrene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
tert-Butylbenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	11/22/2014 8:54:27 AM	R22714
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
trans-1,2-DCE	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1,1-Trichloroethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,1,2-Trichloroethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Trichloroethene (TCE)	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Trichlorofluoromethane	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
1,2,3-Trichloropropane	ND	10		µg/L	5	11/22/2014 8:54:27 AM	R22714
Vinyl chloride	ND	5.0		µg/L	5	11/22/2014 8:54:27 AM	R22714
Xylenes, Total	ND	7.5		µg/L	5	11/22/2014 8:54:27 AM	R22714
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%REC	5	11/22/2014 8:54:27 AM	R22714
Surr: 4-Bromofluorobenzene	89.3	70-130		%REC	5	11/22/2014 8:54:27 AM	R22714
Surr: Dibromofluoromethane	99.0	70-130		%REC	5	11/22/2014 8:54:27 AM	R22714
Surr: Toluene-d8	106	70-130		%REC	5	11/22/2014 8:54:27 AM	R22714

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CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Duplicate 01
Project: Hydrocarbon Seep
Collection Date: 11/18/2014
Lab ID: 1411731-005
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	50	1.0		mg/L	1	11/19/2014 8:35:04 PM	16462
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 8:35:04 PM	16462
Surr: DNOP	105	59-141		%REC	1	11/19/2014 8:35:04 PM	16462
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	11/21/2014 3:45:06 PM	R22716
Surr: BFB	89.5	80-120		%REC	10	11/21/2014 3:45:06 PM	R22716
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Acenaphthylene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Aniline	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Anthracene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Azobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Benz(a)anthracene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Benzoic acid	ND	20		µg/L	1	11/20/2014 6:02:10 PM	16481
Benzyl alcohol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Bis(2-ethylhexyl)phthalate	11	10	B	µg/L	1	11/20/2014 6:02:10 PM	16481
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Carbazole	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
4-Chloroaniline	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2-Chlorophenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Chrysene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Dibenzofuran	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Diethyl phthalate	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Dimethyl phthalate	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2,4-Dichlorophenol	ND	20		µg/L	1	11/20/2014 6:02:10 PM	16481
2,4-Dimethylphenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/20/2014 6:02:10 PM	16481
2,4-Dinitrophenol	ND	20		µg/L	1	11/20/2014 6:02:10 PM	16481
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Fluoranthene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Fluorene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Hexachlorobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Hexachloroethane	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Isophorone	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
1-Methylnaphthalene	83	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2-Methylnaphthalene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2-Methylphenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
3+4-Methylphenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Naphthalene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2-Nitroaniline	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
3-Nitroaniline	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
4-Nitroaniline	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Nitrobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2-Nitrophenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
4-Nitrophenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Pentachlorophenol	ND	20		µg/L	1	11/20/2014 6:02:10 PM	16481
Phenanthrene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Phenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Pyrene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
Pyridine	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2014 6:02:10 PM	16481

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Surr: 2-Fluorophenol	45.6	17.6-104		%REC	1	11/20/2014 6:02:10 PM	16481
Surr: Phenol-d5	41.5	17.7-89.9		%REC	1	11/20/2014 6:02:10 PM	16481
Surr: 2,4,6-Tribromophenol	2.22	16.3-122	S	%REC	1	11/20/2014 6:02:10 PM	16481
Surr: Nitrobenzene-d5	55.0	45.3-117		%REC	1	11/20/2014 6:02:10 PM	16481
Surr: 2-Fluorobiphenyl	48.4	43-113		%REC	1	11/20/2014 6:02:10 PM	16481
Surr: 4-Terphenyl-d14	62.4	47.6-122		%REC	1	11/20/2014 6:02:10 PM	16481
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	11	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Toluene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Ethylbenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2,4-Trimethylbenzene	27	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Naphthalene	36	20		µg/L	10	11/22/2014 9:21:14 AM	R22714
1-Methylnaphthalene	80	40		µg/L	10	11/22/2014 9:21:14 AM	R22714
2-Methylnaphthalene	63	40		µg/L	10	11/22/2014 9:21:14 AM	R22714
Acetone	ND	100		µg/L	10	11/22/2014 9:21:14 AM	R22714
Bromobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Bromodichloromethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Bromoform	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Bromomethane	ND	30		µg/L	10	11/22/2014 9:21:14 AM	R22714
2-Butanone	ND	100		µg/L	10	11/22/2014 9:21:14 AM	R22714
Carbon disulfide	ND	100		µg/L	10	11/22/2014 9:21:14 AM	R22714
Carbon Tetrachloride	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Chlorobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Chloroethane	ND	20		µg/L	10	11/22/2014 9:21:14 AM	R22714
Chloroform	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Chloromethane	ND	30		µg/L	10	11/22/2014 9:21:14 AM	R22714
2-Chlorotoluene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
4-Chlorotoluene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
cis-1,2-DCE	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/22/2014 9:21:14 AM	R22714
Dibromochloromethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Dibromomethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2-Dichlorobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Duplicate 01
Project: Hydrocarbon Seep
Collection Date: 11/18/2014
Lab ID: 1411731-005
Matrix: AQUEOUS
Received Date: 11/18/2014 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,3-Dichlorobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,4-Dichlorobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Dichlorodifluoromethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1-Dichloroethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1-Dichloroethene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2-Dichloropropane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,3-Dichloropropane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
2,2-Dichloropropane	ND	20		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1-Dichloropropene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Hexachlorobutadiene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
2-Hexanone	ND	100		µg/L	10	11/22/2014 9:21:14 AM	R22714
Isopropylbenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
4-Isopropyltoluene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
4-Methyl-2-pentanone	ND	100		µg/L	10	11/22/2014 9:21:14 AM	R22714
Methylene Chloride	ND	30		µg/L	10	11/22/2014 9:21:14 AM	R22714
n-Butylbenzene	ND	30		µg/L	10	11/22/2014 9:21:14 AM	R22714
n-Propylbenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
sec-Butylbenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Styrene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
tert-Butylbenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/22/2014 9:21:14 AM	R22714
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
trans-1,2-DCE	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1,1-Trichloroethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,1,2-Trichloroethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Trichloroethene (TCE)	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Trichlorofluoromethane	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
1,2,3-Trichloropropane	ND	20		µg/L	10	11/22/2014 9:21:14 AM	R22714
Vinyl chloride	ND	10		µg/L	10	11/22/2014 9:21:14 AM	R22714
Xylenes, Total	54	15		µg/L	10	11/22/2014 9:21:14 AM	R22714
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	10	11/22/2014 9:21:14 AM	R22714
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	10	11/22/2014 9:21:14 AM	R22714
Surr: Dibromofluoromethane	91.9	70-130		%REC	10	11/22/2014 9:21:14 AM	R22714
Surr: Toluene-d8	99.7	70-130		%REC	10	11/22/2014 9:21:14 AM	R22714

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **LCS-16462** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **16462** RunNo: **22625**
Prep Date: **11/19/2014** Analysis Date: **11/19/2014** SeqNo: **667726** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	114	69.7	142			
Surr: DNOP	0.61		0.5000		123	59	141			

Sample ID **MB-16462** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **16462** RunNo: **22625**
Prep Date: **11/19/2014** Analysis Date: **11/19/2014** SeqNo: **668220** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		105	59	141			

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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R22638** RunNo: **22638**
Prep Date: Analysis Date: **11/19/2014** SeqNo: **668015** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		84.5	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R22638** RunNo: **22638**
Prep Date: Analysis Date: **11/19/2014** SeqNo: **668016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.6	80	120			
Surr: BFB	18		20.00		91.0	80	120			

Sample ID **1411731-002BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-42** Batch ID: **R22638** RunNo: **22638**
Prep Date: Analysis Date: **11/19/2014** SeqNo: **668024** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	2.5	25.00	0	94.6	70.4	127			
Surr: BFB	920		1000		92.2	80	120			

Sample ID **1411731-002BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-42** Batch ID: **R22638** RunNo: **22638**
Prep Date: Analysis Date: **11/19/2014** SeqNo: **668025** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	2.5	25.00	0	93.6	70.4	127	1.02	20	
Surr: BFB	930		1000		92.6	80	120	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R22716** RunNo: **22716**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **670112** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		92.8	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R22716** RunNo: **22716**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **670113** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R22716**	RunNo:	**22716**
Prep Date:		Analysis Date:	**11/21/2014**	SeqNo:	**670113** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	89.6	80	120			
Surr: BFB	19		20.00		94.0	80	120			

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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22714**	RunNo: **22714**			
Prep Date:	Analysis Date: **11/21/2014**	SeqNo: **669903**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22714** RunNo: **22714**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **669903** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		136	70	130			S
Surr: Dibromofluoromethane	9.4		10.00		94.4	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22714** RunNo: **22714**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **669905** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	101	80	120			
Chlorobenzene	19	1.0	20.00	0	96.7	70	130			

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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R22714**	RunNo: **22714**			
Prep Date:	Analysis Date: **11/21/2014**	SeqNo: **669905**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18	1.0	20.00	0	92.4	82.6	131			
Trichloroethene (TCE)	17	1.0	20.00	0	86.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.5	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		136	70	130			S
Surr: Dibromofluoromethane	9.3		10.00		93.3	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-16481**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16481**	RunNo: **22682**			
Prep Date: **11/19/2014**	Analysis Date: **11/20/2014**	SeqNo: **668827**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	10	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **mb-16481**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16481**	RunNo: **22682**			
Prep Date: **11/19/2014**	Analysis Date: **11/20/2014**	SeqNo: **668827**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	150		200.0		72.8	17.6	104			
Surr: Phenol-d5	140		200.0		70.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	160		200.0		81.6	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		69.6	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		74.0	43	113			
Surr: 4-Terphenyl-d14	99		100.0		99.0	47.6	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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID **lcs-16481** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **16481** RunNo: **22682**
Prep Date: **11/19/2014** Analysis Date: **11/20/2014** SeqNo: **668828** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.9	114			
4-Chloro-3-methylphenol	180	10	200.0	0	88.4	51.7	122			
2-Chlorophenol	150	10	200.0	0	73.0	40.7	113			
1,4-Dichlorobenzene	70	10	100.0	0	69.9	39.6	99.9			
2,4-Dinitrotoluene	70	10	100.0	0	70.1	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.0	51.2	111			
4-Nitrophenol	170	10	200.0	0	85.4	15.7	86.9			
Pentachlorophenol	120	20	200.0	0	60.0	21.6	104			
Phenol	160	10	200.0	0	80.1	28.6	71.7			S
Pyrene	76	10	100.0	0	75.8	54.2	128			
1,2,4-Trichlorobenzene	72	10	100.0	0	72.1	40.9	101			
Surr: 2-Fluorophenol	130		200.0		63.8	17.6	104			
Surr: Phenol-d5	130		200.0		66.5	17.7	89.9			
Surr: 2,4,6-Tribromophenol	160		200.0		82.5	16.3	122			
Surr: Nitrobenzene-d5	67		100.0		66.8	45.3	117			
Surr: 2-Fluorobiphenyl	72		100.0		72.0	43	113			
Surr: 4-Terphenyl-d14	81		100.0		81.0	47.6	122			

Sample ID **lcsd-16481** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **16481** RunNo: **22682**
Prep Date: **11/19/2014** Analysis Date: **11/20/2014** SeqNo: **668829** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	82.9	47.9	114	3.83	27.2	
4-Chloro-3-methylphenol	160	10	200.0	0	82.2	51.7	122	7.36	25.9	
2-Chlorophenol	140	10	200.0	0	71.6	40.7	113	1.87	22.5	
1,4-Dichlorobenzene	69	10	100.0	0	69.3	39.6	99.9	0.948	24.6	
2,4-Dinitrotoluene	71	10	100.0	0	70.8	40.8	113	0.966	25.3	
N-Nitrosodi-n-propylamine	77	10	100.0	0	77.0	51.2	111	2.61	23.6	
4-Nitrophenol	180	10	200.0	0	88.7	15.7	86.9	3.77	34.7	S
Pentachlorophenol	130	20	200.0	0	63.1	21.6	104	4.97	32.8	
Phenol	160	10	200.0	0	78.3	28.6	71.7	2.37	25.5	S
Pyrene	81	10	100.0	0	81.1	54.2	128	6.83	31.4	
1,2,4-Trichlorobenzene	70	10	100.0	0	70.0	40.9	101	2.96	25.9	
Surr: 2-Fluorophenol	120		200.0		62.4	17.6	104	0	0	
Surr: Phenol-d5	130		200.0		64.7	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	170		200.0		85.0	16.3	122	0	0	
Surr: Nitrobenzene-d5	66		100.0		66.0	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	74		100.0		74.2	43	113	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.
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#: **1411731**
25-Nov-14

Client: Western Refining Southwest, Gallup
Project: Hydrocarbon Seep

Sample ID	**lcsd-16481**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**16481**	RunNo:	**22682**
Prep Date:	**11/19/2014**	Analysis Date:	**11/20/2014**	SeqNo:	**668829** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	89		100.0		89.4	47.6	122	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1411731** RcptNo: **1**

Received by/date: 11/18/14

Logged By: **Ashley Gallegos** **11/18/2014 4:15:00 PM**

Completed By: **Ashley Gallegos** **11/18/2014 5:10:29 PM**

Reviewed By: CS 11/19/14

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC

Mailing Address: GALLUP REFINERY
92 GIANT CROSSING ROAD GALLUP NM 87301

Phone #: 505.722.3833

email or Fax#: 505.863.0930

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: HYDROCARBON SEEP

Project #: HYDROCARBON SEEP

Project Manager: C. JOHNSON CHERYL.JOHNSON@WNR.COM

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
11/18/14	0820	GW	MKTF-43	7	HCL/NEAT	-001			✓							✓	✓				
	0900	GW	MKTF-42	7		-002			✓							✓	✓				
	0945	GW	MKTF-41	7		-003			✓							✓	✓				
	1115	GW	MKTF-39	7		-004			✓							✓	✓				
	—	GW	DUPLICATE 01	7		-005			✓							✓	✓				

Date	Time	Relinquished by:	Received by:	Date	Time
11.18.14	1220	[signature]	[signature]	11-18-14	2:00
11-18-14	1615	[signature]	[signature]	11/18/14	1615

Remarks:

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.

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

December 11, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 4th QTR MKTF Wells OrderNo.: 1411861

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 11/19/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1411861**
Date Reported: **12/11/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:00:00 PM
Lab ID: 1411861-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.6	1.0		mg/L	1	11/21/2014 3:42:20 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 3:42:20 AM	16493
Surr: DNOP	92.8	59-141		%REC	1	11/21/2014 3:42:20 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	6.8	0.50		mg/L	10	11/24/2014 11:48:30 PM	R22770
Surr: BFB	96.1	80-120		%REC	10	11/24/2014 11:48:30 PM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.38	0.10		mg/L	1	11/21/2014 5:49:14 PM	R22742
Chloride	96	10		mg/L	20	11/21/2014 6:01:38 PM	R22742
Bromide	ND	0.10		mg/L	1	11/21/2014 5:49:14 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 5:49:14 PM	R22742
Sulfate	19	0.50		mg/L	1	11/21/2014 5:49:14 PM	R22742
Nitrate+Nitrite as N	7.1	1.0		mg/L	5	12/1/2014 11:43:03 AM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.78	0.0020		mg/L	1	12/1/2014 4:21:13 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:21:13 PM	R22857
Calcium	110	10		mg/L	10	12/1/2014 5:31:14 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:21:13 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:21:13 PM	R22857
Iron	6.8	0.20	*	mg/L	10	12/1/2014 5:31:14 PM	R22857
Magnesium	23	1.0		mg/L	1	12/1/2014 4:21:13 PM	R22857
Manganese	2.2	0.020	*	mg/L	10	12/1/2014 5:31:14 PM	R22857
Potassium	1.4	1.0		mg/L	1	12/1/2014 4:21:13 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:21:13 PM	R22857
Sodium	260	10		mg/L	10	12/1/2014 5:31:14 PM	R22857
Zinc	0.024	0.010		mg/L	1	12/1/2014 4:21:13 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.1	0.010		mg/L	5	12/3/2014 1:31:16 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:07:46 PM	16624
Chromium	ND	0.0060		mg/L	1	12/3/2014 1:07:46 PM	16624
Copper	ND	0.0060		mg/L	1	12/3/2014 1:07:46 PM	16624
Iron	15	1.0	*	mg/L	50	12/3/2014 1:32:59 PM	16624
Manganese	3.0	0.010	*	mg/L	5	12/3/2014 1:31:16 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:07:46 PM	16624
Zinc	0.025	0.010		mg/L	1	12/3/2014 1:07:46 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/4/2014 2:53:57 PM	R22933

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:00:00 PM
Lab ID: 1411861-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	0.0010	0.0010		mg/L	1	12/4/2014 1:40:32 PM	R22933
Selenium	ND	0.0050		mg/L	5	12/4/2014 2:53:57 PM	R22933
Uranium	0.0053	0.0010		mg/L	1	12/4/2014 1:40:32 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0028	0.0010		mg/L	1	12/3/2014 5:23:23 PM	16624
Lead	0.014	0.0010		mg/L	1	12/3/2014 5:23:23 PM	16624
Selenium	0.0040	0.0010		mg/L	1	12/3/2014 5:23:23 PM	16624
Uranium	0.0041	0.0010		mg/L	1	12/3/2014 5:23:23 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:10:24 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 4:01:51 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Bis(2-ethylhexyl)phthalate	13	10	B	µg/L	1	11/25/2014 4:01:51 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:00:00 PM
Lab ID: 1411861-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 4:01:51 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 4:01:51 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 4:01:51 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
1-Methylnaphthalene	45	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Naphthalene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 4:01:51 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Phenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:00:00 PM
Lab ID: 1411861-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 4:01:51 PM	16507
Surr: 2-Fluorophenol	67.0	17.6-104		%REC	1	11/25/2014 4:01:51 PM	16507
Surr: Phenol-d5	62.0	17.7-89.9		%REC	1	11/25/2014 4:01:51 PM	16507
Surr: 2,4,6-Tribromophenol	93.1	16.3-122		%REC	1	11/25/2014 4:01:51 PM	16507
Surr: Nitrobenzene-d5	79.0	45.3-117		%REC	1	11/25/2014 4:01:51 PM	16507
Surr: 2-Fluorobiphenyl	80.9	43-113		%REC	1	11/25/2014 4:01:51 PM	16507
Surr: 4-Terphenyl-d14	89.1	47.6-122		%REC	1	11/25/2014 4:01:51 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	1600	200		µg/L	200	11/25/2014 8:50:18 PM	R22801
Toluene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Ethylbenzene	90	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Methyl tert-butyl ether (MTBE)	3900	200		µg/L	200	11/25/2014 8:50:18 PM	R22801
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Naphthalene	ND	20		µg/L	10	11/24/2014 9:18:40 PM	R22767
1-Methylnaphthalene	58	40		µg/L	10	11/24/2014 9:18:40 PM	R22767
2-Methylnaphthalene	ND	40		µg/L	10	11/24/2014 9:18:40 PM	R22767
Acetone	ND	100		µg/L	10	11/24/2014 9:18:40 PM	R22767
Bromobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Bromodichloromethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Bromoform	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Bromomethane	ND	30		µg/L	10	11/24/2014 9:18:40 PM	R22767
2-Butanone	ND	100		µg/L	10	11/24/2014 9:18:40 PM	R22767
Carbon disulfide	ND	100		µg/L	10	11/24/2014 9:18:40 PM	R22767
Carbon Tetrachloride	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Chlorobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Chloroethane	ND	20		µg/L	10	11/24/2014 9:18:40 PM	R22767
Chloroform	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Chloromethane	ND	30		µg/L	10	11/24/2014 9:18:40 PM	R22767
2-Chlorotoluene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
4-Chlorotoluene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
cis-1,2-DCE	10	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:00:00 PM
Lab ID: 1411861-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/24/2014 9:18:40 PM	R22767
Dibromochloromethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Dibromomethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2-Dichlorobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,3-Dichlorobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,4-Dichlorobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Dichlorodifluoromethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1-Dichloroethane	15	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1-Dichloroethene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2-Dichloropropane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,3-Dichloropropane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
2,2-Dichloropropane	ND	20		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1-Dichloropropene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Hexachlorobutadiene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
2-Hexanone	ND	100		µg/L	10	11/24/2014 9:18:40 PM	R22767
Isopropylbenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
4-Isopropyltoluene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
4-Methyl-2-pentanone	ND	100		µg/L	10	11/24/2014 9:18:40 PM	R22767
Methylene Chloride	ND	30		µg/L	10	11/24/2014 9:18:40 PM	R22767
n-Butylbenzene	ND	30		µg/L	10	11/24/2014 9:18:40 PM	R22767
n-Propylbenzene	13	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
sec-Butylbenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Styrene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
tert-Butylbenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/24/2014 9:18:40 PM	R22767
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
trans-1,2-DCE	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1,1-Trichloroethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,1,2-Trichloroethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Trichloroethene (TCE)	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Trichlorofluoromethane	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
1,2,3-Trichloropropane	ND	20		µg/L	10	11/24/2014 9:18:40 PM	R22767
Vinyl chloride	ND	10		µg/L	10	11/24/2014 9:18:40 PM	R22767
Xylenes, Total	ND	15		µg/L	10	11/24/2014 9:18:40 PM	R22767
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	10	11/24/2014 9:18:40 PM	R22767

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:00:00 PM
Lab ID: 1411861-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	10	11/24/2014 9:18:40 PM	R22767
Surr: Dibromofluoromethane	95.0	70-130		%REC	10	11/24/2014 9:18:40 PM	R22767
Surr: Toluene-d8	102	70-130		%REC	10	11/24/2014 9:18:40 PM	R22767

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:55:00 AM
Lab ID: 1411861-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	7.7	1.0		mg/L	1	11/21/2014 4:03:32 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 4:03:32 AM	16493
Surr: DNOP	85.6	59-141		%REC	1	11/21/2014 4:03:32 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	26	1.0		mg/L	20	11/25/2014 1:42:56 AM	R22770
Surr: BFB	103	80-120		%REC	20	11/25/2014 1:42:56 AM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.43	0.10		mg/L	1	11/21/2014 6:38:52 PM	R22742
Chloride	390	10		mg/L	20	11/21/2014 6:51:17 PM	R22742
Bromide	ND	0.10		mg/L	1	11/21/2014 6:38:52 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 6:38:52 PM	R22742
Sulfate	5.9	0.50		mg/L	1	11/21/2014 6:38:52 PM	R22742
Nitrate+Nitrite as N	ND	1.0		mg/L	5	12/1/2014 11:55:28 AM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.57	0.0020		mg/L	1	12/1/2014 4:22:51 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:22:51 PM	R22857
Calcium	77	1.0		mg/L	1	12/1/2014 4:22:51 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:22:51 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:22:51 PM	R22857
Iron	3.1	0.20	*	mg/L	10	12/1/2014 5:33:09 PM	R22857
Magnesium	13	1.0		mg/L	1	12/1/2014 4:22:51 PM	R22857
Manganese	1.7	0.020	*	mg/L	10	12/1/2014 5:33:09 PM	R22857
Potassium	2.1	1.0		mg/L	1	12/1/2014 4:22:51 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:22:51 PM	R22857
Sodium	530	10		mg/L	10	12/1/2014 5:33:09 PM	R22857
Zinc	0.018	0.010		mg/L	1	12/1/2014 4:22:51 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.49	0.0020		mg/L	1	12/3/2014 1:09:28 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:09:28 PM	16624
Chromium	ND	0.0060		mg/L	1	12/3/2014 1:09:28 PM	16624
Copper	ND	0.060		mg/L	10	12/3/2014 1:34:44 PM	16624
Iron	6.2	0.20	*	mg/L	10	12/3/2014 1:34:44 PM	16624
Manganese	1.6	0.020	*	mg/L	10	12/3/2014 1:34:44 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:09:28 PM	16624
Zinc	0.035	0.010		mg/L	1	12/3/2014 1:09:28 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.010	0.0050	*	mg/L	5	12/4/2014 2:56:56 PM	R22933

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:55:00 AM
Lab ID: 1411861-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 1:43:31 PM	R22933
Selenium	ND	0.010		mg/L	10	12/4/2014 3:29:45 PM	R22933
Uranium	0.013	0.0010		mg/L	1	12/4/2014 1:43:31 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.011	0.0010	*	mg/L	1	12/3/2014 5:26:27 PM	16624
Lead	0.0050	0.0010		mg/L	1	12/3/2014 5:26:27 PM	16624
Selenium	0.0067	0.0010		mg/L	1	12/3/2014 5:26:27 PM	16624
Uranium	0.016	0.0010		mg/L	1	12/3/2014 5:26:27 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:12:14 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 4:29:09 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Bis(2-ethylhexyl)phthalate	14	10	B	µg/L	1	11/25/2014 4:29:09 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507

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Lab ID: 1411861-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 4:29:09 PM	16507
2,4-Dimethylphenol	31	10		µg/L	1	11/25/2014 4:29:09 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 4:29:09 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 4:29:09 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
1-Methylnaphthalene	84	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2-Methylnaphthalene	92	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2-Methylphenol	58	10		µg/L	1	11/25/2014 4:29:09 PM	16507
3+4-Methylphenol	53	10		µg/L	1	11/25/2014 4:29:09 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Naphthalene	130	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 4:29:09 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Phenol	27	10		µg/L	1	11/25/2014 4:29:09 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:55:00 AM
Lab ID: 1411861-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Pyrene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 4:29:09 PM	16507
Surr: 2-Fluorophenol	42.5	17.6-104		%REC	1	11/25/2014 4:29:09 PM	16507
Surr: Phenol-d5	51.3	17.7-89.9		%REC	1	11/25/2014 4:29:09 PM	16507
Surr: 2,4,6-Tribromophenol	78.8	16.3-122		%REC	1	11/25/2014 4:29:09 PM	16507
Surr: Nitrobenzene-d5	79.0	45.3-117		%REC	1	11/25/2014 4:29:09 PM	16507
Surr: 2-Fluorobiphenyl	80.2	43-113		%REC	1	11/25/2014 4:29:09 PM	16507
Surr: 4-Terphenyl-d14	80.0	47.6-122		%REC	1	11/25/2014 4:29:09 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	3600	100		µg/L	100	11/24/2014 11:58:52 PM	R22767
Toluene	3000	100		µg/L	100	11/24/2014 11:58:52 PM	R22767
Ethylbenzene	470	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Methyl tert-butyl ether (MTBE)	570	100		µg/L	100	11/24/2014 11:58:52 PM	R22767
1,2,4-Trimethylbenzene	890	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,3,5-Trimethylbenzene	220	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Naphthalene	150	20		µg/L	10	11/25/2014 12:25:34 AM	R22767
1-Methylnaphthalene	74	40		µg/L	10	11/25/2014 12:25:34 AM	R22767
2-Methylnaphthalene	110	40		µg/L	10	11/25/2014 12:25:34 AM	R22767
Acetone	ND	100		µg/L	10	11/25/2014 12:25:34 AM	R22767
Bromobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Bromodichloromethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Bromoform	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Bromomethane	ND	30		µg/L	10	11/25/2014 12:25:34 AM	R22767
2-Butanone	ND	100		µg/L	10	11/25/2014 12:25:34 AM	R22767
Carbon disulfide	ND	100		µg/L	10	11/25/2014 12:25:34 AM	R22767
Carbon Tetrachloride	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Chlorobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Chloroethane	ND	20		µg/L	10	11/25/2014 12:25:34 AM	R22767
Chloroform	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Chloromethane	55	30		µg/L	10	11/25/2014 12:25:34 AM	R22767
2-Chlorotoluene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
4-Chlorotoluene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
cis-1,2-DCE	43	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:55:00 AM
Lab ID: 1411861-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/25/2014 12:25:34 AM	R22767
Dibromochloromethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Dibromomethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2-Dichlorobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,3-Dichlorobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,4-Dichlorobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Dichlorodifluoromethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1-Dichloroethane	150	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1-Dichloroethene	64	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2-Dichloropropane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,3-Dichloropropane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
2,2-Dichloropropane	ND	20		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1-Dichloropropene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Hexachlorobutadiene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
2-Hexanone	ND	100		µg/L	10	11/25/2014 12:25:34 AM	R22767
Isopropylbenzene	34	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
4-Isopropyltoluene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
4-Methyl-2-pentanone	ND	100		µg/L	10	11/25/2014 12:25:34 AM	R22767
Methylene Chloride	ND	30		µg/L	10	11/25/2014 12:25:34 AM	R22767
n-Butylbenzene	ND	30		µg/L	10	11/25/2014 12:25:34 AM	R22767
n-Propylbenzene	66	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
sec-Butylbenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Styrene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
tert-Butylbenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/25/2014 12:25:34 AM	R22767
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
trans-1,2-DCE	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1,1-Trichloroethane	24	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,1,2-Trichloroethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Trichloroethene (TCE)	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Trichlorofluoromethane	ND	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
1,2,3-Trichloropropane	ND	20		µg/L	10	11/25/2014 12:25:34 AM	R22767
Vinyl chloride	22	10		µg/L	10	11/25/2014 12:25:34 AM	R22767
Xylenes, Total	4500	150		µg/L	100	11/24/2014 11:58:52 PM	R22767
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	10	11/25/2014 12:25:34 AM	R22767

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:55:00 AM
Lab ID: 1411861-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	79.2	70-130		%REC	10	11/25/2014 12:25:34 AM	R22767
Surr: Dibromofluoromethane	94.5	70-130		%REC	10	11/25/2014 12:25:34 AM	R22767
Surr: Toluene-d8	98.0	70-130		%REC	10	11/25/2014 12:25:34 AM	R22767

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Qualifiers:

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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.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:15:00 AM
Lab ID: 1411861-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/21/2014 4:24:44 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 4:24:44 AM	16493
Surr: DNOP	96.8	59-141		%REC	1	11/21/2014 4:24:44 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.054	0.050		mg/L	1	11/25/2014 2:11:34 AM	R22770
Surr: BFB	89.7	80-120		%REC	1	11/25/2014 2:11:34 AM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.56	0.10		mg/L	1	11/21/2014 7:03:42 PM	R22742
Chloride	1400	50		mg/L	100	12/1/2014 6:45:06 PM	R22874
Bromide	1.3	0.10		mg/L	1	11/21/2014 7:03:42 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 7:03:42 PM	R22742
Sulfate	730	10		mg/L	20	11/21/2014 7:16:06 PM	R22742
Nitrate+Nitrite as N	ND	1.0		mg/L	5	12/1/2014 12:07:53 PM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.036	0.0020		mg/L	1	12/1/2014 4:24:24 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:24:24 PM	R22857
Calcium	180	10		mg/L	10	12/1/2014 5:35:01 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:24:24 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:24:24 PM	R22857
Iron	0.26	0.020		mg/L	1	12/1/2014 4:24:24 PM	R22857
Magnesium	32	1.0		mg/L	1	12/1/2014 4:24:24 PM	R22857
Manganese	0.021	0.0020		mg/L	1	12/1/2014 4:24:24 PM	R22857
Potassium	ND	1.0		mg/L	1	12/1/2014 4:24:24 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:24:24 PM	R22857
Sodium	1200	20		mg/L	20	12/1/2014 5:36:55 PM	R22857
Zinc	0.039	0.010		mg/L	1	12/1/2014 4:24:24 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.26	0.0020		mg/L	1	12/3/2014 1:11:03 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:11:03 PM	16624
Chromium	0.0070	0.0060		mg/L	1	12/3/2014 1:11:03 PM	16624
Copper	ND	0.0060		mg/L	1	12/3/2014 1:11:03 PM	16624
Iron	8.0	0.20	*	mg/L	10	12/3/2014 1:36:35 PM	16624
Manganese	0.72	0.0020	*	mg/L	1	12/3/2014 1:11:03 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:11:03 PM	16624
Zinc	0.029	0.010		mg/L	1	12/3/2014 1:11:03 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/4/2014 2:59:55 PM	R22933

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:15:00 AM
Lab ID: 1411861-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 1:46:31 PM	R22933
Selenium	ND	0.010		mg/L	10	12/4/2014 2:59:55 PM	R22933
Uranium	0.041	0.0010	*	mg/L	1	12/4/2014 1:46:31 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/5/2014 1:38:07 PM	16624
Lead	0.0090	0.0010		mg/L	1	12/3/2014 5:29:32 PM	16624
Selenium	0.010	0.0050		mg/L	5	12/5/2014 1:38:07 PM	16624
Uranium	0.039	0.0010	*	mg/L	1	12/3/2014 5:29:32 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:14:04 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 4:56:38 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Bis(2-ethylhexyl)phthalate	11	10	B	µg/L	1	11/25/2014 4:56:38 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507

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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:15:00 AM
Lab ID: 1411861-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 4:56:38 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 4:56:38 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 4:56:38 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Naphthalene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 4:56:38 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Phenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:15:00 AM
Lab ID: 1411861-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 4:56:38 PM	16507
Surr: 2-Fluorophenol	55.2	17.6-104		%REC	1	11/25/2014 4:56:38 PM	16507
Surr: Phenol-d5	54.1	17.7-89.9		%REC	1	11/25/2014 4:56:38 PM	16507
Surr: 2,4,6-Tribromophenol	78.3	16.3-122		%REC	1	11/25/2014 4:56:38 PM	16507
Surr: Nitrobenzene-d5	80.3	45.3-117		%REC	1	11/25/2014 4:56:38 PM	16507
Surr: 2-Fluorobiphenyl	77.5	43-113		%REC	1	11/25/2014 4:56:38 PM	16507
Surr: 4-Terphenyl-d14	76.2	47.6-122		%REC	1	11/25/2014 4:56:38 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Toluene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Methyl tert-butyl ether (MTBE)	3.7	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2-Dichloroethane (EDC)	5.3	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Naphthalene	ND	2.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Acetone	ND	10		µg/L	1	11/25/2014 1:18:54 AM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Bromoform	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Bromomethane	ND	3.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
2-Butanone	ND	10		µg/L	1	11/25/2014 1:18:54 AM	R22767
Carbon disulfide	ND	10		µg/L	1	11/25/2014 1:18:54 AM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Chloroethane	ND	2.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Chloroform	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Chloromethane	ND	3.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
cis-1,2-DCE	3.9	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:15:00 AM
Lab ID: 1411861-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1-Dichloroethane	87	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1-Dichloroethene	2.7	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
2-Hexanone	ND	10		µg/L	1	11/25/2014 1:18:54 AM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 1:18:54 AM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Styrene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1,1-Trichloroethane	3.0	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,1,2-Trichloroethane	1.1	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Trichloroethene (TCE)	4.4	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Vinyl chloride	4.8	1.0		µg/L	1	11/25/2014 1:18:54 AM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 1:18:54 AM	R22767
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	11/25/2014 1:18:54 AM	R22767

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 11:15:00 AM
Lab ID: 1411861-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	125	70-130		%REC	1	11/25/2014 1:18:54 AM	R22767
Surr: Dibromofluoromethane	105	70-130		%REC	1	11/25/2014 1:18:54 AM	R22767
Surr: Toluene-d8	106	70-130		%REC	1	11/25/2014 1:18:54 AM	R22767

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:10:00 PM
Lab ID: 1411861-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/21/2014 4:46:00 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 4:46:00 AM	16493
Surr: DNOP	97.9	59-141		%REC	1	11/21/2014 4:46:00 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.068	0.050		mg/L	1	11/25/2014 2:40:12 AM	R22770
Surr: BFB	90.9	80-120		%REC	1	11/25/2014 2:40:12 AM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	0.10		mg/L	1	11/21/2014 7:28:31 PM	R22742
Chloride	920	50		mg/L	100	12/1/2014 6:57:31 PM	R22874
Bromide	ND	0.10		mg/L	1	11/21/2014 7:28:31 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 7:28:31 PM	R22742
Sulfate	82	10		mg/L	20	11/21/2014 7:40:56 PM	R22742
Nitrate+Nitrite as N	ND	1.0		mg/L	5	12/1/2014 12:20:18 PM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.17	0.0020		mg/L	1	12/1/2014 4:26:18 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:26:18 PM	R22857
Calcium	210	10		mg/L	10	12/1/2014 5:38:56 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:26:18 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:26:18 PM	R22857
Iron	ND	0.020		mg/L	1	12/1/2014 4:26:18 PM	R22857
Magnesium	40	1.0		mg/L	1	12/1/2014 4:26:18 PM	R22857
Manganese	0.059	0.0020	*	mg/L	1	12/1/2014 4:26:18 PM	R22857
Potassium	1.7	1.0		mg/L	1	12/1/2014 4:26:18 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:26:18 PM	R22857
Sodium	550	10		mg/L	10	12/1/2014 5:38:56 PM	R22857
Zinc	0.027	0.010		mg/L	1	12/1/2014 4:26:18 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.22	0.0020		mg/L	1	12/3/2014 1:12:52 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:12:52 PM	16624
Chromium	ND	0.0060		mg/L	1	12/3/2014 1:12:52 PM	16624
Copper	ND	0.0060		mg/L	1	12/3/2014 1:12:52 PM	16624
Iron	2.9	0.10	*	mg/L	5	12/3/2014 1:38:27 PM	16624
Manganese	0.24	0.0020	*	mg/L	1	12/3/2014 1:12:52 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:12:52 PM	16624
Zinc	0.017	0.010		mg/L	1	12/3/2014 1:12:52 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/4/2014 3:02:54 PM	R22933

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:10:00 PM
Lab ID: 1411861-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 1:49:30 PM	R22933
Selenium	0.0075	0.0050		mg/L	5	12/4/2014 3:02:54 PM	R22933
Uranium	0.045	0.0050	*	mg/L	5	12/4/2014 3:02:54 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/5/2014 1:47:23 PM	16624
Lead	0.0041	0.0010		mg/L	1	12/3/2014 5:32:37 PM	16624
Selenium	0.0080	0.0050		mg/L	5	12/5/2014 1:47:23 PM	16624
Uranium	0.050	0.0010	*	mg/L	1	12/3/2014 5:32:37 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:15:55 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Aniline	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Anthracene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Azobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Benzoic acid	ND	20		µg/L	1	11/24/2014 7:34:40 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Bis(2-ethylhexyl)phthalate	13	10	B	µg/L	1	11/24/2014 7:34:40 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Carbazole	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Chrysene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:10:00 PM
Lab ID: 1411861-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/24/2014 7:34:40 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/24/2014 7:34:40 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/24/2014 7:34:40 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Fluoranthene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Fluorene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Isophorone	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Naphthalene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/24/2014 7:34:40 PM	16507
Phenanthrene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Phenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:10:00 PM
Lab ID: 1411861-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Pyridine	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/24/2014 7:34:40 PM	16507
Surr: 2-Fluorophenol	69.2	17.6-104		%REC	1	11/24/2014 7:34:40 PM	16507
Surr: Phenol-d5	66.0	17.7-89.9		%REC	1	11/24/2014 7:34:40 PM	16507
Surr: 2,4,6-Tribromophenol	91.1	16.3-122		%REC	1	11/24/2014 7:34:40 PM	16507
Surr: Nitrobenzene-d5	93.4	45.3-117		%REC	1	11/24/2014 7:34:40 PM	16507
Surr: 2-Fluorobiphenyl	87.9	43-113		%REC	1	11/24/2014 7:34:40 PM	16507
Surr: 4-Terphenyl-d14	83.4	47.6-122		%REC	1	11/24/2014 7:34:40 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Toluene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Methyl tert-butyl ether (MTBE)	58	10		µg/L	10	11/25/2014 6:36:29 PM	R22801
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2-Dichloroethane (EDC)	16	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Naphthalene	ND	2.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Acetone	ND	10		µg/L	1	11/25/2014 1:45:34 AM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Bromoform	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Bromomethane	ND	3.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
2-Butanone	ND	10		µg/L	1	11/25/2014 1:45:34 AM	R22767
Carbon disulfide	ND	10		µg/L	1	11/25/2014 1:45:34 AM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Chloroethane	ND	2.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Chloroform	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Chloromethane	ND	3.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
cis-1,2-DCE	1.8	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:10:00 PM
Lab ID: 1411861-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1-Dichloroethane	29	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1-Dichloroethene	34	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
2-Hexanone	ND	10		µg/L	1	11/25/2014 1:45:34 AM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 1:45:34 AM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Styrene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1,1-Trichloroethane	3.9	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,1,2-Trichloroethane	1.6	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Trichloroethene (TCE)	2.4	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Vinyl chloride	1.9	1.0		µg/L	1	11/25/2014 1:45:34 AM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 1:45:34 AM	R22767
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	11/25/2014 1:45:34 AM	R22767

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:10:00 PM
Lab ID: 1411861-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	126	70-130		%REC	1	11/25/2014 1:45:34 AM	R22767
Surr: Dibromofluoromethane	104	70-130		%REC	1	11/25/2014 1:45:34 AM	R22767
Surr: Toluene-d8	103	70-130		%REC	1	11/25/2014 1:45:34 AM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:50:00 PM
Lab ID: 1411861-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/21/2014 5:07:23 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 5:07:23 AM	16493
Surr: DNOP	95.7	59-141		%REC	1	11/21/2014 5:07:23 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.28	0.25		mg/L	5	11/25/2014 3:08:44 AM	R22770
Surr: BFB	90.8	80-120		%REC	5	11/25/2014 3:08:44 AM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.27	0.10		mg/L	1	11/21/2014 7:53:21 PM	R22742
Chloride	610	25		mg/L	50	12/1/2014 7:09:56 PM	R22874
Bromide	1.3	0.10		mg/L	1	11/21/2014 7:53:21 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 7:53:21 PM	R22742
Sulfate	100	10		mg/L	20	11/21/2014 8:05:45 PM	R22742
Nitrate+Nitrite as N	ND	1.0		mg/L	5	12/1/2014 12:32:43 PM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.064	0.0020		mg/L	1	12/1/2014 4:28:21 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:28:21 PM	R22857
Calcium	37	1.0		mg/L	1	12/1/2014 4:28:21 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:28:21 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:28:21 PM	R22857
Iron	0.21	0.020		mg/L	1	12/1/2014 4:28:21 PM	R22857
Magnesium	7.0	1.0		mg/L	1	12/1/2014 4:28:21 PM	R22857
Manganese	0.094	0.0020	*	mg/L	1	12/1/2014 4:28:21 PM	R22857
Potassium	ND	1.0		mg/L	1	12/1/2014 4:28:21 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:28:21 PM	R22857
Sodium	680	10		mg/L	10	12/1/2014 5:40:53 PM	R22857
Zinc	0.010	0.010		mg/L	1	12/1/2014 4:28:21 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.091	0.0020		mg/L	1	12/3/2014 1:14:39 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:14:39 PM	16624
Chromium	ND	0.0060		mg/L	1	12/3/2014 1:14:39 PM	16624
Copper	ND	0.0060		mg/L	1	12/3/2014 1:14:39 PM	16624
Iron	2.0	0.10	*	mg/L	5	12/3/2014 1:40:26 PM	16624
Manganese	0.23	0.0020	*	mg/L	1	12/3/2014 1:14:39 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:14:39 PM	16624
Zinc	0.014	0.010		mg/L	1	12/3/2014 1:14:39 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/4/2014 3:05:53 PM	R22933

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:50:00 PM
Lab ID: 1411861-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 1:52:30 PM	R22933
Selenium	ND	0.010		mg/L	10	12/4/2014 3:32:44 PM	R22933
Uranium	0.059	0.0050	*	mg/L	5	12/4/2014 3:05:53 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/5/2014 1:50:28 PM	16624
Lead	0.0027	0.0010		mg/L	1	12/3/2014 5:35:42 PM	16624
Selenium	ND	0.010		mg/L	10	12/5/2014 3:29:17 PM	16624
Uranium	0.067	0.0050	*	mg/L	5	12/5/2014 1:50:28 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:17:46 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Aniline	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Anthracene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Azobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Benzoic acid	ND	20		µg/L	1	11/24/2014 8:01:40 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Bis(2-ethylhexyl)phthalate	12	10	B	µg/L	1	11/24/2014 8:01:40 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Carbazole	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Chrysene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:50:00 PM
Lab ID: 1411861-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/24/2014 8:01:40 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/24/2014 8:01:40 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/24/2014 8:01:40 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Fluoranthene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Fluorene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Isophorone	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Naphthalene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/24/2014 8:01:40 PM	16507
Phenanthrene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Phenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:50:00 PM
Lab ID: 1411861-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Pyridine	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/24/2014 8:01:40 PM	16507
Surr: 2-Fluorophenol	69.0	17.6-104		%REC	1	11/24/2014 8:01:40 PM	16507
Surr: Phenol-d5	63.4	17.7-89.9		%REC	1	11/24/2014 8:01:40 PM	16507
Surr: 2,4,6-Tribromophenol	86.2	16.3-122		%REC	1	11/24/2014 8:01:40 PM	16507
Surr: Nitrobenzene-d5	87.2	45.3-117		%REC	1	11/24/2014 8:01:40 PM	16507
Surr: 2-Fluorobiphenyl	81.2	43-113		%REC	1	11/24/2014 8:01:40 PM	16507
Surr: 4-Terphenyl-d14	85.9	47.6-122		%REC	1	11/24/2014 8:01:40 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Toluene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Methyl tert-butyl ether (MTBE)	400	20		µg/L	20	11/25/2014 7:03:10 PM	R22801
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2-Dichloroethane (EDC)	28	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Naphthalene	ND	2.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Acetone	ND	10		µg/L	1	11/25/2014 7:29:56 PM	R22801
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Bromoform	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Bromomethane	ND	3.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
2-Butanone	ND	10		µg/L	1	11/25/2014 7:29:56 PM	R22801
Carbon disulfide	ND	10		µg/L	1	11/25/2014 7:29:56 PM	R22801
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Chloroethane	ND	2.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Chloroform	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Chloromethane	13	3.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
cis-1,2-DCE	1.2	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:50:00 PM
Lab ID: 1411861-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1-Dichloroethane	24	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1-Dichloroethene	41	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
2-Hexanone	ND	10		µg/L	1	11/25/2014 7:29:56 PM	R22801
Isopropylbenzene	1.1	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 7:29:56 PM	R22801
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Styrene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1,1-Trichloroethane	1.1	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,1,2-Trichloroethane	2.5	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Vinyl chloride	2.0	1.0		µg/L	1	11/25/2014 7:29:56 PM	R22801
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 7:29:56 PM	R22801
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	1	11/25/2014 7:29:56 PM	R22801

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:50:00 PM
Lab ID: 1411861-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	117	70-130		%REC	1	11/25/2014 7:29:56 PM	R22801
Surr: Dibromofluoromethane	98.1	70-130		%REC	1	11/25/2014 7:29:56 PM	R22801
Surr: Toluene-d8	112	70-130		%REC	1	11/25/2014 7:29:56 PM	R22801

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:30:00 PM
Lab ID: 1411861-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/21/2014 5:28:42 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 5:28:42 AM	16493
Surr: DNOP	94.1	59-141		%REC	1	11/21/2014 5:28:42 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.36	0.25		mg/L	5	11/25/2014 3:37:18 AM	R22770
Surr: BFB	89.3	80-120		%REC	5	11/25/2014 3:37:18 AM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.31	0.10		mg/L	1	11/21/2014 8:18:10 PM	R22742
Chloride	98	10		mg/L	20	11/21/2014 8:30:34 PM	R22742
Bromide	0.61	0.10		mg/L	1	11/21/2014 8:18:10 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 8:18:10 PM	R22742
Sulfate	360	10		mg/L	20	11/21/2014 8:30:34 PM	R22742
Nitrate+Nitrite as N	ND	1.0		mg/L	5	12/1/2014 12:45:07 PM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.064	0.0020		mg/L	1	12/1/2014 4:37:03 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:37:03 PM	R22857
Calcium	89	1.0		mg/L	1	12/1/2014 4:37:03 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:37:03 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:37:03 PM	R22857
Iron	0.061	0.020		mg/L	1	12/1/2014 4:37:03 PM	R22857
Magnesium	19	1.0		mg/L	1	12/1/2014 4:37:03 PM	R22857
Manganese	0.24	0.0020	*	mg/L	1	12/1/2014 4:37:03 PM	R22857
Potassium	1.3	1.0		mg/L	1	12/1/2014 4:37:03 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:37:03 PM	R22857
Sodium	310	10		mg/L	10	12/1/2014 5:43:06 PM	R22857
Zinc	0.016	0.010		mg/L	1	12/1/2014 4:37:03 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.18	0.0020		mg/L	1	12/3/2014 1:16:25 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:16:25 PM	16624
Chromium	ND	0.0060		mg/L	1	12/3/2014 1:16:25 PM	16624
Copper	ND	0.0060		mg/L	1	12/3/2014 1:16:25 PM	16624
Iron	3.3	0.10	*	mg/L	5	12/3/2014 1:42:17 PM	16624
Manganese	0.92	0.0020	*	mg/L	1	12/3/2014 1:16:25 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:16:25 PM	16624
Zinc	0.018	0.010		mg/L	1	12/3/2014 1:16:25 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/4/2014 3:08:52 PM	R22933

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:30:00 PM
Lab ID: 1411861-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 1:55:29 PM	R22933
Selenium	ND	0.0050		mg/L	5	12/4/2014 3:08:52 PM	R22933
Uranium	0.045	0.0010	*	mg/L	1	12/4/2014 1:55:29 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0016	0.0010		mg/L	1	12/3/2014 5:44:59 PM	16624
Lead	0.0050	0.0010		mg/L	1	12/3/2014 5:44:59 PM	16624
Selenium	0.0031	0.0010		mg/L	1	12/3/2014 5:44:59 PM	16624
Uranium	0.043	0.0010	*	mg/L	1	12/3/2014 5:44:59 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:19:38 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Aniline	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Anthracene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Azobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Benzoic acid	ND	20		µg/L	1	11/24/2014 8:28:31 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Bis(2-ethylhexyl)phthalate	12	10	B	µg/L	1	11/24/2014 8:28:31 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Carbazole	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Chrysene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:30:00 PM
Lab ID: 1411861-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/24/2014 8:28:31 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/24/2014 8:28:31 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/24/2014 8:28:31 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Fluoranthene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Fluorene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Isophorone	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Naphthalene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/24/2014 8:28:31 PM	16507
Phenanthrene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Phenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:30:00 PM
Lab ID: 1411861-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Pyridine	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/24/2014 8:28:31 PM	16507
Surr: 2-Fluorophenol	76.9	17.6-104		%REC	1	11/24/2014 8:28:31 PM	16507
Surr: Phenol-d5	68.1	17.7-89.9		%REC	1	11/24/2014 8:28:31 PM	16507
Surr: 2,4,6-Tribromophenol	101	16.3-122		%REC	1	11/24/2014 8:28:31 PM	16507
Surr: Nitrobenzene-d5	98.8	45.3-117		%REC	1	11/24/2014 8:28:31 PM	16507
Surr: 2-Fluorobiphenyl	95.3	43-113		%REC	1	11/24/2014 8:28:31 PM	16507
Surr: 4-Terphenyl-d14	92.4	47.6-122		%REC	1	11/24/2014 8:28:31 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Toluene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Methyl tert-butyl ether (MTBE)	410	20		µg/L	20	11/25/2014 7:56:44 PM	R22801
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Naphthalene	ND	2.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Acetone	ND	10		µg/L	1	11/25/2014 8:23:28 PM	R22801
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Bromoform	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Bromomethane	ND	3.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
2-Butanone	ND	10		µg/L	1	11/25/2014 8:23:28 PM	R22801
Carbon disulfide	ND	10		µg/L	1	11/25/2014 8:23:28 PM	R22801
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Chloroethane	ND	2.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Chloroform	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Chloromethane	ND	3.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:30:00 PM
Lab ID: 1411861-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
2-Hexanone	ND	10		µg/L	1	11/25/2014 8:23:28 PM	R22801
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 8:23:28 PM	R22801
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Styrene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 8:23:28 PM	R22801
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 8:23:28 PM	R22801
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	1	11/25/2014 8:23:28 PM	R22801

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 1:30:00 PM
Lab ID: 1411861-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	117	70-130		%REC	1	11/25/2014 8:23:28 PM	R22801
Surr: Dibromofluoromethane	102	70-130		%REC	1	11/25/2014 8:23:28 PM	R22801
Surr: Toluene-d8	107	70-130		%REC	1	11/25/2014 8:23:28 PM	R22801

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:50:00 PM
Lab ID: 1411861-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/21/2014 5:49:58 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 5:49:58 AM	16493
Surr: DNOP	97.9	59-141		%REC	1	11/21/2014 5:49:58 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/25/2014 4:05:49 AM	R22770
Surr: BFB	88.1	80-120		%REC	1	11/25/2014 4:05:49 AM	R22770
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.54	0.10		mg/L	1	11/21/2014 9:07:48 PM	R22742
Chloride	400	25		mg/L	50	12/1/2014 7:22:21 PM	R22874
Bromide	2.2	0.10		mg/L	1	11/21/2014 9:07:48 PM	R22742
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/21/2014 9:07:48 PM	R22742
Sulfate	73	10		mg/L	20	11/21/2014 9:20:12 PM	R22742
Nitrate+Nitrite as N	6.6	1.0		mg/L	5	12/1/2014 12:57:32 PM	R22874
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.15	0.0020		mg/L	1	12/1/2014 4:38:55 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:38:55 PM	R22857
Calcium	63	1.0		mg/L	1	12/1/2014 4:38:55 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:38:55 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 4:38:55 PM	R22857
Iron	ND	0.020		mg/L	1	12/1/2014 4:38:55 PM	R22857
Magnesium	14	1.0		mg/L	1	12/1/2014 4:38:55 PM	R22857
Manganese	0.0041	0.0020		mg/L	1	12/1/2014 4:38:55 PM	R22857
Potassium	1.8	1.0		mg/L	1	12/1/2014 4:38:55 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 4:38:55 PM	R22857
Sodium	360	10		mg/L	10	12/1/2014 5:44:54 PM	R22857
Zinc	0.051	0.010		mg/L	1	12/1/2014 4:38:55 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.17	0.0020		mg/L	1	12/3/2014 1:18:01 PM	16624
Cadmium	ND	0.0020		mg/L	1	12/3/2014 1:18:01 PM	16624
Chromium	ND	0.0060		mg/L	1	12/3/2014 1:18:01 PM	16624
Copper	ND	0.0060		mg/L	1	12/3/2014 1:18:01 PM	16624
Iron	2.4	0.10	*	mg/L	5	12/3/2014 1:44:09 PM	16624
Manganese	0.075	0.0020	*	mg/L	1	12/3/2014 1:18:01 PM	16624
Silver	ND	0.0050		mg/L	1	12/3/2014 1:18:01 PM	16624
Zinc	0.037	0.010		mg/L	1	12/3/2014 1:18:01 PM	16624
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/4/2014 3:11:51 PM	R22933

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:50:00 PM
Lab ID: 1411861-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 2:04:28 PM	R22933
Selenium	ND	0.020		mg/L	20	12/4/2014 3:35:43 PM	R22933
Uranium	0.027	0.0010		mg/L	1	12/4/2014 2:04:28 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/5/2014 3:32:22 PM	16624
Lead	0.0014	0.0010		mg/L	1	12/3/2014 5:48:04 PM	16624
Selenium	ND	0.020		mg/L	20	12/5/2014 3:38:32 PM	16624
Uranium	0.026	0.0010		mg/L	1	12/3/2014 5:48:04 PM	16624
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:21:22 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Aniline	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Anthracene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Azobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Benzoic acid	ND	20		µg/L	1	11/24/2014 8:55:25 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Bis(2-ethylhexyl)phthalate	14	10	B	µg/L	1	11/24/2014 8:55:25 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Carbazole	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Chrysene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:50:00 PM
Lab ID: 1411861-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/24/2014 8:55:25 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/24/2014 8:55:25 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/24/2014 8:55:25 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Fluoranthene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Fluorene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Isophorone	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Naphthalene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/24/2014 8:55:25 PM	16507
Phenanthrene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Phenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:50:00 PM
Lab ID: 1411861-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Pyridine	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/24/2014 8:55:25 PM	16507
Surr: 2-Fluorophenol	73.8	17.6-104		%REC	1	11/24/2014 8:55:25 PM	16507
Surr: Phenol-d5	66.0	17.7-89.9		%REC	1	11/24/2014 8:55:25 PM	16507
Surr: 2,4,6-Tribromophenol	92.5	16.3-122		%REC	1	11/24/2014 8:55:25 PM	16507
Surr: Nitrobenzene-d5	87.1	45.3-117		%REC	1	11/24/2014 8:55:25 PM	16507
Surr: 2-Fluorobiphenyl	89.5	43-113		%REC	1	11/24/2014 8:55:25 PM	16507
Surr: 4-Terphenyl-d14	88.5	47.6-122		%REC	1	11/24/2014 8:55:25 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Toluene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Naphthalene	ND	2.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Acetone	ND	10		µg/L	1	11/25/2014 3:05:26 AM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Bromoform	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Bromomethane	ND	3.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
2-Butanone	ND	10		µg/L	1	11/25/2014 3:05:26 AM	R22767
Carbon disulfide	ND	10		µg/L	1	11/25/2014 3:05:26 AM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Chloroethane	ND	2.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Chloroform	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Chloromethane	ND	3.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:50:00 PM
Lab ID: 1411861-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1-Dichloroethane	1.5	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
2-Hexanone	ND	10		µg/L	1	11/25/2014 3:05:26 AM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 3:05:26 AM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Styrene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Trichloroethene (TCE)	1.4	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 3:05:26 AM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 3:05:26 AM	R22767
Surr: 1,2-Dichloroethane-d4	108	70-130		%REC	1	11/25/2014 3:05:26 AM	R22767

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Qualifiers:

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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
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 2:50:00 PM
Lab ID: 1411861-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	116	70-130		%REC	1	11/25/2014 3:05:26 AM	R22767
Surr: Dibromofluoromethane	103	70-130		%REC	1	11/25/2014 3:05:26 AM	R22767
Surr: Toluene-d8	106	70-130		%REC	1	11/25/2014 3:05:26 AM	R22767

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Qualifiers:

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2014 4th QTR MKTF Wells
Collection Date:
Lab ID: 1411861-008
Matrix: TRIP BLANK
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Toluene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Naphthalene	ND	2.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Acetone	ND	10		µg/L	1	11/24/2014 8:51:56 PM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Bromoform	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Bromomethane	ND	3.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
2-Butanone	ND	10		µg/L	1	11/24/2014 8:51:56 PM	R22767
Carbon disulfide	ND	10		µg/L	1	11/24/2014 8:51:56 PM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Chloroethane	ND	2.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Chloroform	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Chloromethane	ND	3.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
cis-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,1-Dichloroethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,1-Dichloroethene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/24/2014 8:51:56 PM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2014 4th QTR MKTF Wells
Collection Date:
Lab ID: 1411861-008
Matrix: TRIP BLANK
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
2-Hexanone	ND	10		µg/L	1	11/24/2014 8:51:56 PM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/24/2014 8:51:56 PM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Styrene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Vinyl chloride	ND	1.0		µg/L	1	11/24/2014 8:51:56 PM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/24/2014 8:51:56 PM	R22767
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%REC	1	11/24/2014 8:51:56 PM	R22767
Surr: 4-Bromofluorobenzene	119	70-130		%REC	1	11/24/2014 8:51:56 PM	R22767
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	11/24/2014 8:51:56 PM	R22767
Surr: Toluene-d8	108	70-130		%REC	1	11/24/2014 8:51:56 PM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 8:00:00 AM
Lab ID: 1411861-009
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Toluene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Naphthalene	ND	2.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Acetone	ND	10		µg/L	1	11/25/2014 3:32:03 AM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Bromoform	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Bromomethane	ND	3.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
2-Butanone	ND	10		µg/L	1	11/25/2014 3:32:03 AM	R22767
Carbon disulfide	ND	10		µg/L	1	11/25/2014 3:32:03 AM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Chloroethane	ND	2.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Chloroform	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Chloromethane	ND	3.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 3:32:03 AM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014 8:00:00 AM
Lab ID: 1411861-009
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
2-Hexanone	ND	10		µg/L	1	11/25/2014 3:32:03 AM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 3:32:03 AM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Styrene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 3:32:03 AM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 3:32:03 AM	R22767
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	11/25/2014 3:32:03 AM	R22767
Surr: 4-Bromofluorobenzene	122	70-130		%REC	1	11/25/2014 3:32:03 AM	R22767
Surr: Dibromofluoromethane	95.1	70-130		%REC	1	11/25/2014 3:32:03 AM	R22767
Surr: Toluene-d8	107	70-130		%REC	1	11/25/2014 3:32:03 AM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-11-17-14
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014
Lab ID: 1411861-010
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Aniline	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Anthracene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Azobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Benzoic acid	ND	20		µg/L	1	11/24/2014 9:22:16 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Carbazole	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Chrysene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/24/2014 9:22:16 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/24/2014 9:22:16 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/24/2014 9:22:16 PM	16507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-11-17-14
Project: 2014 4th QTR MKTF Wells
Collection Date: 11/17/2014
Lab ID: 1411861-010
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Fluoranthene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Fluorene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Isophorone	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Naphthalene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/24/2014 9:22:16 PM	16507
Phenanthrene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Phenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Pyrene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Pyridine	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/24/2014 9:22:16 PM	16507
Surr: 2-Fluorophenol	70.6	17.6-104		%REC	1	11/24/2014 9:22:16 PM	16507
Surr: Phenol-d5	63.6	17.7-89.9		%REC	1	11/24/2014 9:22:16 PM	16507
Surr: 2,4,6-Tribromophenol	98.0	16.3-122		%REC	1	11/24/2014 9:22:16 PM	16507
Surr: Nitrobenzene-d5	89.2	45.3-117		%REC	1	11/24/2014 9:22:16 PM	16507
Surr: 2-Fluorobiphenyl	88.0	43-113		%REC	1	11/24/2014 9:22:16 PM	16507
Surr: 4-Terphenyl-d14	91.3	47.6-122		%REC	1	11/24/2014 9:22:16 PM	16507

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674626** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674627** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.2	85	115			
Cadmium	0.47	0.0020	0.5000	0	94.6	85	115			
Calcium	50	1.0	50.00	0	99.2	85	115			
Chromium	0.47	0.0060	0.5000	0	93.8	85	115			
Copper	0.46	0.0060	0.5000	0	92.3	85	115			
Iron	0.47	0.020	0.5000	0	93.2	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.46	0.0020	0.5000	0	91.1	85	115			
Potassium	48	1.0	50.00	0	96.9	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Sodium	49	1.0	50.00	0	98.8	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674628** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674628** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674629** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.6	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			
Copper	0.48	0.0060	0.5000	0	95.4	85	115			
Iron	0.48	0.020	0.5000	0	96.9	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.47	0.0020	0.5000	0	93.9	85	115			
Potassium	48	1.0	50.00	0	96.8	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	49	1.0	50.00	0	98.9	85	115			
Zinc	0.49	0.010	0.5000	0	97.3	85	115			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **MB-16624** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **16624** RunNo: **22897**
Prep Date: **12/2/2014** Analysis Date: **12/3/2014** SeqNo: **676181** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-16624** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **16624** RunNo: **22897**
Prep Date: **12/2/2014** Analysis Date: **12/3/2014** SeqNo: **676182** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.9	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.1	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.49	0.020	0.5000	0	97.7	85	115			
Manganese	0.47	0.0020	0.5000	0	94.4	85	115			
Silver	0.11	0.0050	0.1000	0	107	85	115			
Zinc	0.48	0.010	0.5000	0	96.7	85	115			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677289** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.4	85	115			
Lead	0.024	0.0010	0.02500	0	97.8	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.025	0.0010	0.02500	0	99.9	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677290** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.024	0.0010	0.02500	0	96.7	85	115			
Selenium	0.024	0.0010	0.02500	0	95.5	85	115			
Uranium	0.023	0.0010	0.02500	0	92.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677291** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677292** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **LLLCS-16624** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **16624** RunNo: **22904**
Prep Date: **12/2/2014** Analysis Date: **12/3/2014** SeqNo: **676459** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.7	85	115			
Lead	0.026	0.0010	0.02500	0	102	85	115			
Selenium	0.025	0.0010	0.02500	0	101	85	115			
Uranium	0.027	0.0010	0.02500	0	110	85	115			

Sample ID **MB-16624** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **16624** RunNo: **22904**
Prep Date: **12/2/2014** Analysis Date: **12/3/2014** SeqNo: **676461** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID	**MB-16625**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**16625**	RunNo:	**22882**
Prep Date:	**12/2/2014**	Analysis Date:	**12/2/2014**	SeqNo:	**675569** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-16625**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**16625**	RunNo:	**22882**
Prep Date:	**12/2/2014**	Analysis Date:	**12/2/2014**	SeqNo:	**675570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	107	80	120			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22742** RunNo: **22742**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **670973** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R22742** RunNo: **22742**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **670974** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.5	90	110			
Chloride	4.7	0.50	5.000	0	94.8	90	110			
Bromide	2.5	0.10	2.500	0	98.9	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	95.3	90	110			
Sulfate	9.6	0.50	10.00	0	96.3	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22742** RunNo: **22742**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **671027** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R22742** RunNo: **22742**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **671028** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			
Chloride	4.7	0.50	5.000	0	93.3	90	110			
Bromide	2.3	0.10	2.500	0	90.9	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	95.9	90	110			
Sulfate	9.5	0.50	10.00	0	95.5	90	110			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**			
Client ID: **PBW**	Batch ID: **R22874**	RunNo: **22874**			
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675189**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**			
Client ID: **LCSW**	Batch ID: **R22874**	RunNo: **22874**			
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675190**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	91.2	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.3	90	110			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **MB-16493**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range**		
Client ID: **PBW**	Batch ID: **16493**	RunNo: **22660**		
Prep Date: **11/20/2014**	Analysis Date: **11/21/2014**	SeqNo: **669374**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.87		1.000		87.2	59	141			

Sample ID **LCS-16493**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range**		
Client ID: **LCSW**	Batch ID: **16493**	RunNo: **22660**		
Prep Date: **11/20/2014**	Analysis Date: **11/21/2014**	SeqNo: **669375**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	119	69.7	142			
Surr: DNOP	0.47		0.5000		93.2	59	141			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **B27** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R22770** RunNo: **22770**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671706** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		91.5	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R22770** RunNo: **22770**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671707** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.5	80	120			
Surr: BFB	20		20.00		98.4	80	120			

Sample ID **1411861-001BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-22** Batch ID: **R22770** RunNo: **22770**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **671710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	0.50	5.000	6.792	119	70.4	127			
Surr: BFB	210		200.0		104	80	120			

Sample ID **1411861-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-22** Batch ID: **R22770** RunNo: **22770**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **671712** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	0.50	5.000	6.792	105	70.4	127	5.34	20	
Surr: BFB	210		200.0		104	80	120	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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22767**	RunNo: **22767**			
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671611**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671611** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.1	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		141	70	130			S
Surr: Dibromofluoromethane	8.1		10.00		80.9	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	19	1.0	20.00	0	94.6	80	120			
Chlorobenzene	18	1.0	20.00	0	91.8	70	130			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	97.0	82.6	131			
Trichloroethene (TCE)	17	1.0	20.00	0	85.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		120	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.4	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671653** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	22	1.0	20.00	0	108	80	120			
Chlorobenzene	19	1.0	20.00	0	97.2	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.0	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	93.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671935** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R22767**	RunNo: **22767**	
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671935**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671935** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.4	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22801** RunNo: **22801**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **672809** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22801**	RunNo: **22801**			
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672809**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22801** RunNo: **22801**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **672809** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		124	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.9	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22801** RunNo: **22801**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **672811** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	107	80	120			
Chlorobenzene	19	1.0	20.00	0	93.7	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.7	82.6	131			
Trichloroethene (TCE)	18	1.0	20.00	0	92.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.6	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **mb-16507**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16507**	RunNo: **22768**			
Prep Date: **11/21/2014**	Analysis Date: **11/24/2014**	SeqNo: **671719**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	14	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **mb-16507**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16507**	RunNo: **22768**			
Prep Date: **11/21/2014**	Analysis Date: **11/24/2014**	SeqNo: **671719**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	160		200.0		78.3	17.6	104			
Surr: Phenol-d5	160		200.0		81.6	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		89.3	16.3	122			
Surr: Nitrobenzene-d5	80		100.0		80.5	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		79.6	43	113			
Surr: 4-Terphenyl-d14	87		100.0		87.4	47.6	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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID **lcs-16507** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **16507** RunNo: **22768**
Prep Date: **11/21/2014** Analysis Date: **11/24/2014** SeqNo: **671720** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	79	10	100.0	0	78.9	47.9	114			
4-Chloro-3-methylphenol	180	10	200.0	0	89.2	51.7	122			
2-Chlorophenol	150	10	200.0	0	77.3	40.7	113			
1,4-Dichlorobenzene	66	10	100.0	0	66.0	39.6	99.9			
2,4-Dinitrotoluene	62	10	100.0	0	61.8	40.8	113			
N-Nitrosodi-n-propylamine	78	10	100.0	0	78.2	51.2	111			
4-Nitrophenol	160	10	200.0	0	80.2	15.7	86.9			
Pentachlorophenol	140	20	200.0	0	68.7	21.6	104			
Phenol	170	10	200.0	0	83.3	28.6	71.7			S
Pyrene	81	10	100.0	0	81.0	54.2	128			
1,2,4-Trichlorobenzene	71	10	100.0	0	71.1	40.9	101			
Surr: 2-Fluorophenol	140		200.0		70.0	17.6	104			
Surr: Phenol-d5	150		200.0		75.8	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		88.2	16.3	122			
Surr: Nitrobenzene-d5	80		100.0		79.8	45.3	117			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	43	113			
Surr: 4-Terphenyl-d14	90		100.0		89.5	47.6	122			

Sample ID **lcsd-16507** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **16507** RunNo: **22768**
Prep Date: **11/21/2014** Analysis Date: **11/24/2014** SeqNo: **671721** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	90	10	100.0	0	89.8	47.9	114	13.0	27.2	
4-Chloro-3-methylphenol	190	10	200.0	0	95.3	51.7	122	6.67	25.9	
2-Chlorophenol	180	10	200.0	0	90.7	40.7	113	15.9	22.5	
1,4-Dichlorobenzene	81	10	100.0	0	80.5	39.6	99.9	19.9	24.6	
2,4-Dinitrotoluene	79	10	100.0	0	79.1	40.8	113	24.5	25.3	
N-Nitrosodi-n-propylamine	92	10	100.0	0	91.5	51.2	111	15.7	23.6	
4-Nitrophenol	180	10	200.0	0	91.4	15.7	86.9	13.1	34.7	S
Pentachlorophenol	160	20	200.0	0	78.2	21.6	104	12.9	32.8	
Phenol	190	10	200.0	0	96.4	28.6	71.7	14.5	25.5	S
Pyrene	93	10	100.0	0	93.4	54.2	128	14.3	31.4	
1,2,4-Trichlorobenzene	80	10	100.0	0	80.1	40.9	101	11.9	25.9	
Surr: 2-Fluorophenol	160		200.0		79.0	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		83.5	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.6	16.3	122	0	0	
Surr: Nitrobenzene-d5	81		100.0		81.2	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	80		100.0		80.4	43	113	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.
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#: **1411861**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF Wells

Sample ID	**lcsd-16507**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**16507**	RunNo:	**22768**
Prep Date:	**11/21/2014**	Analysis Date:	**11/24/2014**	SeqNo:	**671721** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	93		100.0		93.3	47.6	122	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1411861 RcptNo: 1

Received by/date: CS 11/19/14

Logged By: **Ashley Gallegos** 11/19/2014 4:00:00 PM AG

Completed By: **Ashley Gallegos** 11/20/2014 10:08:00 AM AG

Reviewed By: MG 11/20/14

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° 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 ☑ MG 11/20/14 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 21
(<2 or >12 unless noted)
Adjusted? YES
Checked by: MG

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: For dissolved metals analysis: Added 0.4 mL HNO_3 to 001F, 003F, 004F for Acceptable pH. For Total Metals analysis: Added 1 mL HNO_3 to 002A for acceptable pH. Held in login for 24 hours after preservation. MG 11/20/14

18. **Cooler Information**

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

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2014 4th QTR MKTF WELLS

(MKTF - 23, 33, 32, 31, 25)

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: X Yes ☐ No

Sample Temperature: 1.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411861	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions									Air Bubbles (Y or N)
11/17/2014	1300	AQUEOUS	MKTF-22	MISC	MISC	-001	X	X	X	X	X	X									
11/17/2014	1155	AQUEOUS	MKTF-23	MISC	MISC	-002	X	X	X	X	X	X									
11/17/2014	1115	AQUEOUS	MKTF-30	MISC	MISC	-003	X	X	X	X	X	X									
11/17/2014	1410	AQUEOUS	MKTF-31	MISC	MISC	-004	X	X	X	X	X	X									
11/17/2014	1350	AQUEOUS	MKTF-32	MISC	MISC	-005	X	X	X	X	X	X									
11/17/2014	1330	AQUEOUS	MKTF-33	MISC	MISC	-006	X	X	X	X	X	X									
11/17/2014	1450	AQUEOUS	MKTF-34	MISC	MISC	-007	X	X	X	X	X	X									
				1 288 11/20/14																	
11/17/2014		AQUEOUS	TRIP BLANK	3-40ML VOAS	HCL	-008	X														
11/17/2014	800	AQUEOUS	FIELD BLANK	3-40ML VOAS	HCL	-009	X														
11/17/2014		AQUEOUS	BD-MKTF-11-17-14	1L AMBER	NONE	-010			X												

Date	Time	Relinquished by:	Received by:	Date	Time
11/19/2014	1130			11-19-14	2:00
11-19-14	400		Celina Sanna	11/19/14	1600

Remarks:

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.

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

December 11, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 4th QTR MKTF WELLS/STP-1NW OrderNo.: 1411835

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 11/19/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1411835**
Date Reported: **12/11/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 9:55:00 AM
Lab ID: 1411835-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.7	1.0		mg/L	1	11/21/2014 1:34:33 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 1:34:33 AM	16493
Surr: DNOP	77.0	59-141		%REC	1	11/21/2014 1:34:33 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	53	2.5		mg/L	50	11/22/2014 1:18:18 AM	R22716
Surr: BFB	90.2	80-120		%REC	50	11/22/2014 1:18:18 AM	R22716
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	1.5	0.50		mg/L	5	11/19/2014 8:47:37 PM	R22657
Chloride	700	25		mg/L	50	12/1/2014 9:52:38 PM	R22875
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	11/19/2014 8:47:37 PM	R22657
Bromide	1.8	0.50		mg/L	5	11/19/2014 8:47:37 PM	R22657
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	11/19/2014 8:47:37 PM	R22657
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	11/19/2014 8:47:37 PM	R22657
Sulfate	ND	2.5		mg/L	5	11/19/2014 8:47:37 PM	R22657
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.88	0.0020		mg/L	1	12/1/2014 3:47:27 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:47:27 PM	R22857
Calcium	62	1.0		mg/L	1	12/1/2014 3:47:27 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:47:27 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 3:47:27 PM	R22857
Iron	7.2	0.20	*	mg/L	10	12/1/2014 5:11:30 PM	R22857
Magnesium	16	1.0		mg/L	1	12/1/2014 3:47:27 PM	R22857
Manganese	1.1	0.020	*	mg/L	10	12/1/2014 5:11:30 PM	R22857
Potassium	1.2	1.0		mg/L	1	12/1/2014 3:47:27 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 3:47:27 PM	R22857
Sodium	840	10		mg/L	10	12/1/2014 5:11:30 PM	R22857
Zinc	0.019	0.010		mg/L	1	12/1/2014 3:47:27 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.1	0.010		mg/L	5	12/1/2014 4:43:26 PM	16592
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:58:07 PM	16592
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:58:07 PM	16592
Copper	ND	0.0060		mg/L	1	12/1/2014 3:58:07 PM	16592
Iron	10	0.40	*	mg/L	20	12/1/2014 4:45:08 PM	16592
Manganese	1.3	0.010	*	mg/L	5	12/1/2014 4:43:26 PM	16592
Silver	ND	0.0050		mg/L	1	12/1/2014 3:58:07 PM	16592
Zinc	0.050	0.010		mg/L	1	12/1/2014 3:58:07 PM	16592
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 9:55:00 AM
Lab ID: 1411835-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.011	0.010	*	mg/L	10	12/4/2014 2:28:21 PM	R22933
Lead	ND	0.0010		mg/L	1	12/4/2014 12:40:43 PM	R22933
Selenium	ND	0.010		mg/L	10	12/4/2014 2:28:21 PM	R22933
Uranium	ND	0.0010		mg/L	1	12/4/2014 12:40:43 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.010	0.0050	*	mg/L	5	12/3/2014 6:09:38 PM	16592
Lead	0.0042	0.0010		mg/L	1	12/3/2014 3:52:49 PM	16592
Selenium	ND	0.050		mg/L	5	12/3/2014 6:09:38 PM	16592
Uranium	0.0016	0.0010		mg/L	1	12/3/2014 3:52:49 PM	16592
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 1:54:07 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Aniline	18	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 11:03:09 AM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Bis(2-ethylhexyl)phthalate	14	10	B	µg/L	1	11/25/2014 11:03:09 AM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 9:55:00 AM
Lab ID: 1411835-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 11:03:09 AM	16507
2,4-Dimethylphenol	80	10		µg/L	1	11/25/2014 11:03:09 AM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 11:03:09 AM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 11:03:09 AM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
1-Methylnaphthalene	47	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2-Methylnaphthalene	51	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2-Methylphenol	140	10		µg/L	1	11/25/2014 11:03:09 AM	16507
3+4-Methylphenol	16	10		µg/L	1	11/25/2014 11:03:09 AM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Naphthalene	130	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 11:03:09 AM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 9:55:00 AM
Lab ID: 1411835-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Phenol	38	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 11:03:09 AM	16507
Surr: 2-Fluorophenol	33.6	17.6-104		%REC	1	11/25/2014 11:03:09 AM	16507
Surr: Phenol-d5	50.8	17.7-89.9		%REC	1	11/25/2014 11:03:09 AM	16507
Surr: 2,4,6-Tribromophenol	93.1	16.3-122		%REC	1	11/25/2014 11:03:09 AM	16507
Surr: Nitrobenzene-d5	83.6	45.3-117		%REC	1	11/25/2014 11:03:09 AM	16507
Surr: 2-Fluorobiphenyl	82.3	43-113		%REC	1	11/25/2014 11:03:09 AM	16507
Surr: 4-Terphenyl-d14	85.0	47.6-122		%REC	1	11/25/2014 11:03:09 AM	16507
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	20000	500		µg/L	500	11/24/2014 2:10:28 PM	R22767
Toluene	1200	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Ethylbenzene	1300	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Methyl tert-butyl ether (MTBE)	1400	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2,4-Trimethylbenzene	1000	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,3,5-Trimethylbenzene	360	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Naphthalene	160	100		µg/L	50	11/24/2014 2:37:14 PM	R22767
1-Methylnaphthalene	ND	200		µg/L	50	11/24/2014 2:37:14 PM	R22767
2-Methylnaphthalene	ND	200		µg/L	50	11/24/2014 2:37:14 PM	R22767
Acetone	ND	500		µg/L	50	11/24/2014 2:37:14 PM	R22767
Bromobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Bromodichloromethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Bromoform	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Bromomethane	ND	150		µg/L	50	11/24/2014 2:37:14 PM	R22767
2-Butanone	ND	500		µg/L	50	11/24/2014 2:37:14 PM	R22767
Carbon disulfide	ND	500		µg/L	50	11/24/2014 2:37:14 PM	R22767
Carbon Tetrachloride	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Chlorobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Chloroethane	ND	100		µg/L	50	11/24/2014 2:37:14 PM	R22767
Chloroform	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Chloromethane	ND	150		µg/L	50	11/24/2014 2:37:14 PM	R22767
2-Chlorotoluene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
4-Chlorotoluene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
cis-1,2-DCE	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 9:55:00 AM
Lab ID: 1411835-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
cis-1,3-Dichloropropene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	11/24/2014 2:37:14 PM	R22767
Dibromochloromethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Dibromomethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,3-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,4-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Dichlorodifluoromethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1-Dichloroethane	81	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1-Dichloroethene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2-Dichloropropane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,3-Dichloropropane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
2,2-Dichloropropane	ND	100		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1-Dichloropropene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Hexachlorobutadiene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
2-Hexanone	ND	500		µg/L	50	11/24/2014 2:37:14 PM	R22767
Isopropylbenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
4-Isopropyltoluene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
4-Methyl-2-pentanone	ND	500		µg/L	50	11/24/2014 2:37:14 PM	R22767
Methylene Chloride	ND	150		µg/L	50	11/24/2014 2:37:14 PM	R22767
n-Butylbenzene	ND	150		µg/L	50	11/24/2014 2:37:14 PM	R22767
n-Propylbenzene	90	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
sec-Butylbenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Styrene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
tert-Butylbenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	11/24/2014 2:37:14 PM	R22767
Tetrachloroethene (PCE)	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
trans-1,2-DCE	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
trans-1,3-Dichloropropene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2,3-Trichlorobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2,4-Trichlorobenzene	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1,1-Trichloroethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,1,2-Trichloroethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Trichloroethene (TCE)	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Trichlorofluoromethane	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
1,2,3-Trichloropropane	ND	100		µg/L	50	11/24/2014 2:37:14 PM	R22767
Vinyl chloride	ND	50		µg/L	50	11/24/2014 2:37:14 PM	R22767
Xylenes, Total	5800	75		µg/L	50	11/24/2014 2:37:14 PM	R22767

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Qualifiers:

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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.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 9:55:00 AM
Lab ID: 1411835-001
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	50	11/24/2014 2:37:14 PM	R22767
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	50	11/24/2014 2:37:14 PM	R22767
Surr: Dibromofluoromethane	89.9	70-130		%REC	50	11/24/2014 2:37:14 PM	R22767
Surr: Toluene-d8	105	70-130		%REC	50	11/24/2014 2:37:14 PM	R22767

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:15:00 PM
Lab ID: 1411835-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.4	1.0		mg/L	1	11/21/2014 1:55:47 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 1:55:47 AM	16493
Surr: DNOP	82.6	59-141		%REC	1	11/21/2014 1:55:47 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.2	1.0		mg/L	20	11/22/2014 1:45:38 AM	R22716
Surr: BFB	90.2	80-120		%REC	20	11/22/2014 1:45:38 AM	R22716
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.66	0.10		mg/L	1	11/19/2014 9:12:26 PM	R22657
Chloride	84	10		mg/L	20	11/19/2014 9:24:51 PM	R22657
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	11/19/2014 9:12:26 PM	R22657
Bromide	0.44	0.10		mg/L	1	11/19/2014 9:12:26 PM	R22657
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	11/19/2014 9:12:26 PM	R22657
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/19/2014 9:12:26 PM	R22657
Sulfate	200	10		mg/L	20	11/19/2014 9:24:51 PM	R22657
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.14	0.0020		mg/L	1	12/1/2014 3:49:28 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:49:28 PM	R22857
Calcium	92	1.0		mg/L	1	12/1/2014 3:49:28 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:49:28 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 3:49:28 PM	R22857
Iron	0.080	0.020		mg/L	1	12/1/2014 3:49:28 PM	R22857
Magnesium	17	1.0		mg/L	1	12/1/2014 3:49:28 PM	R22857
Manganese	2.8	0.010	*	mg/L	5	12/1/2014 5:13:20 PM	R22857
Potassium	1.1	1.0		mg/L	1	12/1/2014 3:49:28 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 3:49:28 PM	R22857
Sodium	280	5.0		mg/L	5	12/1/2014 5:13:20 PM	R22857
Zinc	0.027	0.010		mg/L	1	12/1/2014 3:49:28 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.21	0.0020		mg/L	1	12/1/2014 3:59:59 PM	16592
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:59:59 PM	16592
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:59:59 PM	16592
Copper	ND	0.0060		mg/L	1	12/1/2014 3:59:59 PM	16592
Iron	2.0	0.10	*	mg/L	5	12/1/2014 4:48:53 PM	16592
Manganese	3.0	0.010	*	mg/L	5	12/1/2014 4:48:53 PM	16592
Silver	ND	0.0050		mg/L	1	12/1/2014 3:59:59 PM	16592
Zinc	0.019	0.010		mg/L	1	12/1/2014 3:59:59 PM	16592
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:15:00 PM
Lab ID: 1411835-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0047	0.0010		mg/L	1	12/4/2014 12:43:42 PM	R22933
Lead	ND	0.0010		mg/L	1	12/4/2014 12:43:42 PM	R22933
Selenium	ND	0.010		mg/L	1	12/4/2014 12:43:42 PM	R22933
Uranium	0.022	0.0010		mg/L	1	12/4/2014 12:43:42 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0051	0.0010		mg/L	1	12/3/2014 4:02:05 PM	16592
Lead	0.0031	0.0010		mg/L	1	12/3/2014 4:02:05 PM	16592
Selenium	ND	0.010		mg/L	1	12/3/2014 4:02:05 PM	16592
Uranium	0.025	0.0010		mg/L	1	12/3/2014 4:02:05 PM	16592
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 1:55:53 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Aniline	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 11:30:29 AM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Bis(2-ethylhexyl)phthalate	10	10	B	µg/L	1	11/25/2014 11:30:29 AM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:15:00 PM
Lab ID: 1411835-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 11:30:29 AM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 11:30:29 AM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 11:30:29 AM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Naphthalene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 11:30:29 AM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:15:00 PM
Lab ID: 1411835-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Phenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 11:30:29 AM	16507
Surr: 2-Fluorophenol	61.9	17.6-104		%REC	1	11/25/2014 11:30:29 AM	16507
Surr: Phenol-d5	59.2	17.7-89.9		%REC	1	11/25/2014 11:30:29 AM	16507
Surr: 2,4,6-Tribromophenol	79.9	16.3-122		%REC	1	11/25/2014 11:30:29 AM	16507
Surr: Nitrobenzene-d5	74.6	45.3-117		%REC	1	11/25/2014 11:30:29 AM	16507
Surr: 2-Fluorobiphenyl	77.6	43-113		%REC	1	11/25/2014 11:30:29 AM	16507
Surr: 4-Terphenyl-d14	79.4	47.6-122		%REC	1	11/25/2014 11:30:29 AM	16507
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	140	10		µg/L	10	11/24/2014 4:51:11 PM	R22767
Toluene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Ethylbenzene	78	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Methyl tert-butyl ether (MTBE)	570	100		µg/L	100	11/24/2014 4:24:27 PM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Naphthalene	ND	2.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Acetone	ND	10		µg/L	1	11/25/2014 9:16:58 PM	R22801
Bromobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Bromoform	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Bromomethane	ND	3.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
2-Butanone	ND	10		µg/L	1	11/25/2014 9:16:58 PM	R22801
Carbon disulfide	ND	10		µg/L	1	11/25/2014 9:16:58 PM	R22801
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Chlorobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Chloroethane	ND	2.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Chloroform	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Chloromethane	ND	3.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:15:00 PM
Lab ID: 1411835-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Dibromomethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
2-Hexanone	ND	10		µg/L	1	11/25/2014 9:16:58 PM	R22801
Isopropylbenzene	9.1	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
4-Isopropyltoluene	3.0	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2014 9:16:58 PM	R22801
Methylene Chloride	ND	3.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
n-Propylbenzene	13	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
sec-Butylbenzene	2.1	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Styrene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Vinyl chloride	ND	1.0		µg/L	1	11/25/2014 9:16:58 PM	R22801
Xylenes, Total	ND	1.5		µg/L	1	11/25/2014 9:16:58 PM	R22801

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:15:00 PM
Lab ID: 1411835-002
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	11/25/2014 9:16:58 PM	R22801
Surr: 4-Bromofluorobenzene	88.4	70-130		%REC	1	11/25/2014 9:16:58 PM	R22801
Surr: Dibromofluoromethane	92.5	70-130		%REC	1	11/25/2014 9:16:58 PM	R22801
Surr: Toluene-d8	104	70-130		%REC	1	11/25/2014 9:16:58 PM	R22801

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 4:15:00 PM
Lab ID: 1411835-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.3	1.0		mg/L	1	11/21/2014 2:17:09 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 2:17:09 AM	16493
Surr: DNOP	81.6	59-141		%REC	1	11/21/2014 2:17:09 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.4	0.25		mg/L	5	11/22/2014 2:12:57 AM	R22716
Surr: BFB	98.2	80-120		%REC	5	11/22/2014 2:12:57 AM	R22716
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.68	0.50		mg/L	5	11/19/2014 9:37:15 PM	R22657
Chloride	160	10		mg/L	20	11/19/2014 9:49:40 PM	R22657
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	11/19/2014 9:37:15 PM	R22657
Bromide	0.81	0.50		mg/L	5	11/19/2014 9:37:15 PM	R22657
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	11/19/2014 9:37:15 PM	R22657
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	11/19/2014 9:37:15 PM	R22657
Sulfate	ND	2.5		mg/L	5	11/19/2014 9:37:15 PM	R22657
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.4	0.010	*	mg/L	5	12/1/2014 5:15:15 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:51:14 PM	R22857
Calcium	77	1.0		mg/L	1	12/1/2014 3:51:14 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:51:14 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 3:51:14 PM	R22857
Iron	3.4	0.10	*	mg/L	5	12/1/2014 5:15:15 PM	R22857
Magnesium	21	1.0		mg/L	1	12/1/2014 3:51:14 PM	R22857
Manganese	1.7	0.010	*	mg/L	5	12/1/2014 5:15:15 PM	R22857
Potassium	1.1	1.0		mg/L	1	12/1/2014 3:51:14 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 3:51:14 PM	R22857
Sodium	280	5.0		mg/L	5	12/1/2014 5:15:15 PM	R22857
Zinc	0.025	0.010		mg/L	1	12/1/2014 3:51:14 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.5	0.010	*	mg/L	5	12/1/2014 4:50:52 PM	16592
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:01:34 PM	16592
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:01:34 PM	16592
Copper	ND	0.0060		mg/L	1	12/1/2014 4:01:34 PM	16592
Iron	4.0	0.10	*	mg/L	5	12/1/2014 4:50:52 PM	16592
Manganese	1.8	0.010	*	mg/L	5	12/1/2014 4:50:52 PM	16592
Silver	ND	0.0050		mg/L	1	12/1/2014 4:01:34 PM	16592
Zinc	0.020	0.010		mg/L	1	12/1/2014 4:01:34 PM	16592
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 4:15:00 PM
Lab ID: 1411835-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0020	0.0010		mg/L	1	12/4/2014 12:46:41 PM	R22933
Lead	ND	0.0010		mg/L	1	12/4/2014 12:46:41 PM	R22933
Selenium	ND	0.010		mg/L	1	12/4/2014 12:46:41 PM	R22933
Uranium	ND	0.0010		mg/L	1	12/4/2014 12:46:41 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0019	0.0010		mg/L	1	12/3/2014 4:05:10 PM	16592
Lead	0.0016	0.0010		mg/L	1	12/3/2014 4:05:10 PM	16592
Selenium	ND	0.010		mg/L	1	12/3/2014 4:05:10 PM	16592
Uranium	ND	0.0010		mg/L	1	12/3/2014 4:05:10 PM	16592
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 1:57:39 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Aniline	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 11:57:50 AM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Bis(2-ethylhexyl)phthalate	12	10	B	µg/L	1	11/25/2014 11:57:50 AM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 4:15:00 PM
Lab ID: 1411835-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 11:57:50 AM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 11:57:50 AM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 11:57:50 AM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
1-Methylnaphthalene	110	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2-Methylnaphthalene	36	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Naphthalene	55	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 11:57:50 AM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507

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Qualifiers:

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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.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 4:15:00 PM
Lab ID: 1411835-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Phenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 11:57:50 AM	16507
Surr: 2-Fluorophenol	72.2	17.6-104		%REC	1	11/25/2014 11:57:50 AM	16507
Surr: Phenol-d5	64.6	17.7-89.9		%REC	1	11/25/2014 11:57:50 AM	16507
Surr: 2,4,6-Tribromophenol	89.5	16.3-122		%REC	1	11/25/2014 11:57:50 AM	16507
Surr: Nitrobenzene-d5	85.1	45.3-117		%REC	1	11/25/2014 11:57:50 AM	16507
Surr: 2-Fluorobiphenyl	85.1	43-113		%REC	1	11/25/2014 11:57:50 AM	16507
Surr: 4-Terphenyl-d14	80.6	47.6-122		%REC	1	11/25/2014 11:57:50 AM	16507
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	96	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Toluene	7.6	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Ethylbenzene	90	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Methyl tert-butyl ether (MTBE)	100	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2,4-Trimethylbenzene	96	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,3,5-Trimethylbenzene	23	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Naphthalene	88	10		µg/L	5	11/24/2014 5:44:45 PM	R22767
1-Methylnaphthalene	200	20		µg/L	5	11/24/2014 5:44:45 PM	R22767
2-Methylnaphthalene	82	20		µg/L	5	11/24/2014 5:44:45 PM	R22767
Acetone	ND	50		µg/L	5	11/24/2014 5:44:45 PM	R22767
Bromobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Bromodichloromethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Bromoform	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Bromomethane	ND	15		µg/L	5	11/24/2014 5:44:45 PM	R22767
2-Butanone	ND	50		µg/L	5	11/24/2014 5:44:45 PM	R22767
Carbon disulfide	ND	50		µg/L	5	11/24/2014 5:44:45 PM	R22767
Carbon Tetrachloride	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Chlorobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Chloroethane	ND	10		µg/L	5	11/24/2014 5:44:45 PM	R22767
Chloroform	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Chloromethane	ND	15		µg/L	5	11/24/2014 5:44:45 PM	R22767
2-Chlorotoluene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
4-Chlorotoluene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
cis-1,2-DCE	5.6	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 4:15:00 PM
Lab ID: 1411835-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	11/24/2014 5:44:45 PM	R22767
Dibromochloromethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Dibromomethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2-Dichlorobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,3-Dichlorobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,4-Dichlorobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Dichlorodifluoromethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1-Dichloroethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1-Dichloroethene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2-Dichloropropane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,3-Dichloropropane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
2,2-Dichloropropane	ND	10		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1-Dichloropropene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Hexachlorobutadiene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
2-Hexanone	ND	50		µg/L	5	11/24/2014 5:44:45 PM	R22767
Isopropylbenzene	8.8	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
4-Isopropyltoluene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
4-Methyl-2-pentanone	ND	50		µg/L	5	11/24/2014 5:44:45 PM	R22767
Methylene Chloride	ND	15		µg/L	5	11/24/2014 5:44:45 PM	R22767
n-Butylbenzene	ND	15		µg/L	5	11/24/2014 5:44:45 PM	R22767
n-Propylbenzene	13	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
sec-Butylbenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Styrene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
tert-Butylbenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	11/24/2014 5:44:45 PM	R22767
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
trans-1,2-DCE	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1,1-Trichloroethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,1,2-Trichloroethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Trichloroethene (TCE)	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Trichlorofluoromethane	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
1,2,3-Trichloropropane	ND	10		µg/L	5	11/24/2014 5:44:45 PM	R22767
Vinyl chloride	ND	5.0		µg/L	5	11/24/2014 5:44:45 PM	R22767
Xylenes, Total	47	7.5		µg/L	5	11/24/2014 5:44:45 PM	R22767

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 4:15:00 PM
Lab ID: 1411835-003
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	5	11/24/2014 5:44:45 PM	R22767
Surr: 4-Bromofluorobenzene	82.5	70-130		%REC	5	11/24/2014 5:44:45 PM	R22767
Surr: Dibromofluoromethane	92.5	70-130		%REC	5	11/24/2014 5:44:45 PM	R22767
Surr: Toluene-d8	104	70-130		%REC	5	11/24/2014 5:44:45 PM	R22767

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:30:00 PM
Lab ID: 1411835-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	13	1.0		mg/L	1	11/21/2014 2:38:25 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 2:38:25 AM	16493
Surr: DNOP	86.6	59-141		%REC	1	11/21/2014 2:38:25 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	20	2.5		mg/L	50	11/22/2014 2:40:17 AM	R22716
Surr: BFB	91.2	80-120		%REC	50	11/22/2014 2:40:17 AM	R22716
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	0.50		mg/L	5	11/19/2014 10:02:04 PM	R22657
Chloride	110	10		mg/L	20	11/19/2014 10:14:29 PM	R22657
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	11/19/2014 10:02:04 PM	R22657
Bromide	1.2	0.50		mg/L	5	11/19/2014 10:02:04 PM	R22657
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	11/19/2014 10:02:04 PM	R22657
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	11/19/2014 10:02:04 PM	R22657
Sulfate	ND	2.5		mg/L	5	11/19/2014 10:02:04 PM	R22657
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.6	0.010		mg/L	5	12/1/2014 5:17:09 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:52:55 PM	R22857
Calcium	140	5.0		mg/L	5	12/1/2014 5:17:09 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:52:55 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 3:52:55 PM	R22857
Iron	11	0.40	*	mg/L	20	12/1/2014 5:18:54 PM	R22857
Magnesium	28	1.0		mg/L	1	12/1/2014 3:52:55 PM	R22857
Manganese	3.0	0.010	*	mg/L	5	12/1/2014 5:17:09 PM	R22857
Potassium	1.1	1.0		mg/L	1	12/1/2014 3:52:55 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 3:52:55 PM	R22857
Sodium	270	5.0		mg/L	5	12/1/2014 5:17:09 PM	R22857
Zinc	0.018	0.010		mg/L	1	12/1/2014 3:52:55 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	3.6	0.020	*	mg/L	10	12/1/2014 4:52:45 PM	16592
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:03:16 PM	16592
Chromium	0.035	0.0060		mg/L	1	12/1/2014 4:03:16 PM	16592
Copper	0.043	0.0060		mg/L	1	12/1/2014 4:03:16 PM	16592
Iron	47	2.0	*	mg/L	100	12/1/2014 4:54:42 PM	16592
Manganese	5.6	0.020	*	mg/L	10	12/1/2014 4:52:45 PM	16592
Silver	ND	0.0050		mg/L	1	12/1/2014 4:03:16 PM	16592
Zinc	0.11	0.010		mg/L	1	12/1/2014 4:03:16 PM	16592
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 2:30:00 PM
Lab ID: 1411835-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.022	0.010	*	mg/L	10	12/4/2014 3:26:46 PM	R22933
Lead	0.0019	0.0010		mg/L	1	12/4/2014 12:49:40 PM	R22933
Selenium	ND	0.010		mg/L	10	12/4/2014 3:26:46 PM	R22933
Uranium	ND	0.0010		mg/L	1	12/4/2014 12:49:40 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.022	0.010	*	mg/L	10	12/3/2014 6:18:55 PM	16592
Lead	0.079	0.010	*	mg/L	10	12/3/2014 6:18:55 PM	16592
Selenium	ND	0.010		mg/L	10	12/3/2014 6:18:55 PM	16592
Uranium	0.014	0.0010		mg/L	1	12/3/2014 4:08:15 PM	16592
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 1:59:25 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 2:14:18 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Bis(2-ethylhexyl)phthalate	11	10	B	µg/L	1	11/25/2014 2:14:18 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507

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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1411835-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 2:14:18 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 2:14:18 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 2:14:18 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
1-Methylnaphthalene	110	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2-Methylnaphthalene	33	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Naphthalene	54	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 2:14:18 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507

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Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Phenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 2:14:18 PM	16507
Surr: 2-Fluorophenol	70.5	17.6-104		%REC	1	11/25/2014 2:14:18 PM	16507
Surr: Phenol-d5	63.3	17.7-89.9		%REC	1	11/25/2014 2:14:18 PM	16507
Surr: 2,4,6-Tribromophenol	85.3	16.3-122		%REC	1	11/25/2014 2:14:18 PM	16507
Surr: Nitrobenzene-d5	87.2	45.3-117		%REC	1	11/25/2014 2:14:18 PM	16507
Surr: 2-Fluorobiphenyl	79.3	43-113		%REC	1	11/25/2014 2:14:18 PM	16507
Surr: 4-Terphenyl-d14	84.9	47.6-122		%REC	1	11/25/2014 2:14:18 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	2300	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Toluene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Ethylbenzene	740	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Methyl tert-butyl ether (MTBE)	9700	500		µg/L	500	11/25/2014 11:30:40 PM	R22801
1,2,4-Trimethylbenzene	830	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,3,5-Trimethylbenzene	110	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Naphthalene	580	100		µg/L	50	11/24/2014 6:11:31 PM	R22767
1-Methylnaphthalene	410	200		µg/L	50	11/24/2014 6:11:31 PM	R22767
2-Methylnaphthalene	540	200		µg/L	50	11/24/2014 6:11:31 PM	R22767
Acetone	ND	500		µg/L	50	11/24/2014 6:11:31 PM	R22767
Bromobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Bromodichloromethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Bromoform	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Bromomethane	ND	150		µg/L	50	11/24/2014 6:11:31 PM	R22767
2-Butanone	ND	500		µg/L	50	11/24/2014 6:11:31 PM	R22767
Carbon disulfide	ND	500		µg/L	50	11/24/2014 6:11:31 PM	R22767
Carbon Tetrachloride	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Chlorobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Chloroethane	ND	100		µg/L	50	11/24/2014 6:11:31 PM	R22767
Chloroform	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Chloromethane	ND	150		µg/L	50	11/24/2014 6:11:31 PM	R22767
2-Chlorotoluene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
4-Chlorotoluene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
cis-1,2-DCE	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767

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Lab ID: 1411835-004
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
cis-1,3-Dichloropropene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	11/24/2014 6:11:31 PM	R22767
Dibromochloromethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Dibromomethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,3-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,4-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Dichlorodifluoromethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1-Dichloroethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1-Dichloroethene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2-Dichloropropane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,3-Dichloropropane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
2,2-Dichloropropane	ND	100		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1-Dichloropropene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Hexachlorobutadiene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
2-Hexanone	ND	500		µg/L	50	11/24/2014 6:11:31 PM	R22767
Isopropylbenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
4-Isopropyltoluene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
4-Methyl-2-pentanone	ND	500		µg/L	50	11/24/2014 6:11:31 PM	R22767
Methylene Chloride	ND	150		µg/L	50	11/24/2014 6:11:31 PM	R22767
n-Butylbenzene	ND	150		µg/L	50	11/24/2014 6:11:31 PM	R22767
n-Propylbenzene	110	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
sec-Butylbenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Styrene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
tert-Butylbenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	11/24/2014 6:11:31 PM	R22767
Tetrachloroethene (PCE)	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
trans-1,2-DCE	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
trans-1,3-Dichloropropene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2,3-Trichlorobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2,4-Trichlorobenzene	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1,1-Trichloroethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,1,2-Trichloroethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Trichloroethene (TCE)	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Trichlorofluoromethane	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
1,2,3-Trichloropropane	ND	100		µg/L	50	11/24/2014 6:11:31 PM	R22767
Vinyl chloride	ND	50		µg/L	50	11/24/2014 6:11:31 PM	R22767
Xylenes, Total	360	75		µg/L	50	11/24/2014 6:11:31 PM	R22767

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	50	11/24/2014 6:11:31 PM	R22767
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	50	11/24/2014 6:11:31 PM	R22767
Surr: Dibromofluoromethane	96.0	70-130		%REC	50	11/24/2014 6:11:31 PM	R22767
Surr: Toluene-d8	101	70-130		%REC	50	11/24/2014 6:11:31 PM	R22767

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 10:15:00 AM
Lab ID: 1411835-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	24	1.0		mg/L	1	11/21/2014 2:59:45 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 2:59:45 AM	16493
Surr: DNOP	84.5	59-141		%REC	1	11/21/2014 2:59:45 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	45	5.0		mg/L	100	11/22/2014 3:07:34 AM	R22716
Surr: BFB	89.7	80-120		%REC	100	11/22/2014 3:07:34 AM	R22716
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.87	0.50		mg/L	5	11/19/2014 10:26:53 PM	R22657
Chloride	82	2.5		mg/L	5	11/19/2014 10:26:53 PM	R22657
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	11/19/2014 10:26:53 PM	R22657
Bromide	ND	0.50		mg/L	5	11/19/2014 10:26:53 PM	R22657
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	11/19/2014 10:26:53 PM	R22657
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	11/19/2014 10:26:53 PM	R22657
Sulfate	16	2.5		mg/L	5	11/19/2014 10:26:53 PM	R22657
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Calcium	110	5.0		mg/L	5	12/1/2014 5:27:42 PM	R22857
Magnesium	20	1.0		mg/L	1	12/1/2014 3:54:35 PM	R22857
Potassium	22	1.0		mg/L	1	12/1/2014 3:54:35 PM	R22857
Sodium	100	5.0		mg/L	5	12/1/2014 5:27:42 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	4.5	0.020	*	mg/L	10	12/1/2014 5:07:46 PM	16592
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:12:12 PM	16592
Chromium	0.022	0.0060		mg/L	1	12/1/2014 4:12:12 PM	16592
Copper	0.12	0.0060		mg/L	1	12/1/2014 4:12:12 PM	16592
Iron	45	2.0	*	mg/L	100	12/1/2014 5:09:30 PM	16592
Manganese	4.9	0.020	*	mg/L	10	12/1/2014 5:07:46 PM	16592
Silver	ND	0.0050		mg/L	1	12/1/2014 4:12:12 PM	16592
Zinc	0.19	0.010		mg/L	1	12/1/2014 4:12:12 PM	16592
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.017	0.0050	*	mg/L	5	12/3/2014 6:22:00 PM	16592
Lead	0.048	0.0010	*	mg/L	1	12/3/2014 4:11:20 PM	16592
Selenium	ND	0.0050		mg/L	5	12/3/2014 6:22:00 PM	16592
Uranium	0.0066	0.0010		mg/L	1	12/3/2014 4:11:20 PM	16592
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	0.00028	0.00020		mg/L	1	12/2/2014 2:01:14 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 10:15:00 AM
Lab ID: 1411835-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 2:40:51 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Bis(2-ethylhexyl)phthalate	14	10	B	µg/L	1	11/25/2014 2:40:51 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 2:40:51 PM	16507
2,4-Dimethylphenol	610	100		µg/L	10	12/2/2014 12:30:33 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 2:40:51 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 2:40:51 PM	16507

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 10:15:00 AM
Lab ID: 1411835-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
1-Methylnaphthalene	110	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2-Methylnaphthalene	66	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2-Methylphenol	120	10		µg/L	1	11/25/2014 2:40:51 PM	16507
3+4-Methylphenol	51	10		µg/L	1	11/25/2014 2:40:51 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Naphthalene	100	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 2:40:51 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Phenol	37	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 2:40:51 PM	16507
Surr: 2-Fluorophenol	21.6	17.6-104		%REC	1	11/25/2014 2:40:51 PM	16507
Surr: Phenol-d5	57.8	17.7-89.9		%REC	1	11/25/2014 2:40:51 PM	16507
Surr: 2,4,6-Tribromophenol	90.9	16.3-122		%REC	1	11/25/2014 2:40:51 PM	16507
Surr: Nitrobenzene-d5	78.5	45.3-117		%REC	1	11/25/2014 2:40:51 PM	16507
Surr: 2-Fluorobiphenyl	72.5	43-113		%REC	1	11/25/2014 2:40:51 PM	16507
Surr: 4-Terphenyl-d14	68.5	47.6-122		%REC	1	11/25/2014 2:40:51 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 10:15:00 AM
Lab ID: 1411835-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	4400	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Toluene	1300	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Ethylbenzene	480	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Methyl tert-butyl ether (MTBE)	83	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2,4-Trimethylbenzene	1800	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,3,5-Trimethylbenzene	530	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Naphthalene	160	100		µg/L	50	11/24/2014 7:31:42 PM	R22767
1-Methylnaphthalene	ND	200		µg/L	50	11/24/2014 7:31:42 PM	R22767
2-Methylnaphthalene	ND	200		µg/L	50	11/24/2014 7:31:42 PM	R22767
Acetone	ND	500		µg/L	50	11/24/2014 7:31:42 PM	R22767
Bromobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Bromodichloromethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Bromoform	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Bromomethane	ND	150		µg/L	50	11/24/2014 7:31:42 PM	R22767
2-Butanone	ND	500		µg/L	50	11/24/2014 7:31:42 PM	R22767
Carbon disulfide	ND	500		µg/L	50	11/24/2014 7:31:42 PM	R22767
Carbon Tetrachloride	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Chlorobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Chloroethane	ND	100		µg/L	50	11/24/2014 7:31:42 PM	R22767
Chloroform	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Chloromethane	ND	150		µg/L	50	11/24/2014 7:31:42 PM	R22767
2-Chlorotoluene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
4-Chlorotoluene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
cis-1,2-DCE	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
cis-1,3-Dichloropropene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	11/24/2014 7:31:42 PM	R22767
Dibromochloromethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Dibromomethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,3-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,4-Dichlorobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Dichlorodifluoromethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,1-Dichloroethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,1-Dichloroethene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2-Dichloropropane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,3-Dichloropropane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
2,2-Dichloropropane	ND	100		µg/L	50	11/24/2014 7:31:42 PM	R22767

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 10:15:00 AM
Lab ID: 1411835-005
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Hexachlorobutadiene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
2-Hexanone	ND	500		µg/L	50	11/24/2014 7:31:42 PM	R22767
Isopropylbenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
4-Isopropyltoluene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
4-Methyl-2-pentanone	ND	500		µg/L	50	11/24/2014 7:31:42 PM	R22767
Methylene Chloride	ND	150		µg/L	50	11/24/2014 7:31:42 PM	R22767
n-Butylbenzene	ND	150		µg/L	50	11/24/2014 7:31:42 PM	R22767
n-Propylbenzene	120	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
sec-Butylbenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Styrene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
tert-Butylbenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	11/24/2014 7:31:42 PM	R22767
Tetrachloroethene (PCE)	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
trans-1,2-DCE	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
trans-1,3-Dichloropropene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2,3-Trichlorobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2,4-Trichlorobenzene	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,1,1-Trichloroethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,1,2-Trichloroethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Trichloroethene (TCE)	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Trichlorofluoromethane	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
1,2,3-Trichloropropane	ND	100		µg/L	50	11/24/2014 7:31:42 PM	R22767
Vinyl chloride	ND	50		µg/L	50	11/24/2014 7:31:42 PM	R22767
Xylenes, Total	10000	75		µg/L	50	11/24/2014 7:31:42 PM	R22767
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	50	11/24/2014 7:31:42 PM	R22767
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	50	11/24/2014 7:31:42 PM	R22767
Surr: Dibromofluoromethane	88.8	70-130		%REC	50	11/24/2014 7:31:42 PM	R22767
Surr: Toluene-d8	99.3	70-130		%REC	50	11/24/2014 7:31:42 PM	R22767

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 1:15:00 PM
Lab ID: 1411835-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/21/2014 3:20:58 AM	16493
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/21/2014 3:20:58 AM	16493
Surr: DNOP	95.7	59-141		%REC	1	11/21/2014 3:20:58 AM	16493
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/22/2014 3:34:53 AM	R22716
Surr: BFB	89.5	80-120		%REC	1	11/22/2014 3:34:53 AM	R22716
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	0.29	0.10		mg/L	1	11/19/2014 11:16:32 PM	R22657
Chloride	1800	100		mg/L	200	12/1/2014 10:05:02 PM	R22875
Nitrogen, Nitrite (As N)	ND	2.0		mg/L	20	11/19/2014 11:53:46 PM	R22657
Bromide	2.8	0.10		mg/L	1	11/19/2014 11:16:32 PM	R22657
Nitrogen, Nitrate (As N)	18	2.0	*	mg/L	20	11/19/2014 11:53:46 PM	R22657
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/19/2014 11:16:32 PM	R22657
Sulfate	120	10		mg/L	20	11/19/2014 11:53:46 PM	R22657
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.12	0.0020		mg/L	1	12/1/2014 3:56:06 PM	R22857
Cadmium	ND	0.0020		mg/L	1	12/1/2014 3:56:06 PM	R22857
Calcium	64	1.0		mg/L	1	12/1/2014 3:56:06 PM	R22857
Chromium	ND	0.0060		mg/L	1	12/1/2014 3:56:06 PM	R22857
Copper	ND	0.0060		mg/L	1	12/1/2014 3:56:06 PM	R22857
Iron	0.026	0.020		mg/L	1	12/1/2014 3:56:06 PM	R22857
Magnesium	8.5	1.0		mg/L	1	12/1/2014 3:56:06 PM	R22857
Manganese	0.028	0.0020		mg/L	1	12/1/2014 3:56:06 PM	R22857
Potassium	6.0	1.0		mg/L	1	12/1/2014 3:56:06 PM	R22857
Silver	ND	0.0050		mg/L	1	12/1/2014 3:56:06 PM	R22857
Sodium	1200	20		mg/L	20	12/1/2014 5:29:23 PM	R22857
Zinc	0.058	0.010		mg/L	1	12/1/2014 3:56:06 PM	R22857
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	12/1/2014 4:13:55 PM	16592
Cadmium	ND	0.0020		mg/L	1	12/1/2014 4:13:55 PM	16592
Chromium	ND	0.0060		mg/L	1	12/1/2014 4:13:55 PM	16592
Copper	ND	0.0060		mg/L	1	12/1/2014 4:13:55 PM	16592
Iron	0.15	0.020		mg/L	1	12/1/2014 4:13:55 PM	16592
Manganese	0.032	0.0020		mg/L	1	12/1/2014 4:13:55 PM	16592
Silver	ND	0.0050		mg/L	1	12/1/2014 4:13:55 PM	16592
Zinc	0.032	0.010		mg/L	1	12/1/2014 4:13:55 PM	16592
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 1:15:00 PM
Lab ID: 1411835-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/4/2014 2:40:20 PM	R22933
Lead	ND	0.0010		mg/L	1	12/4/2014 12:58:39 PM	R22933
Selenium	0.023	0.010		mg/L	10	12/4/2014 2:40:20 PM	R22933
Uranium	0.026	0.0010		mg/L	1	12/4/2014 12:58:39 PM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/3/2014 6:25:06 PM	16592
Lead	ND	0.0010		mg/L	1	12/3/2014 4:14:25 PM	16592
Selenium	0.024	0.010		mg/L	10	12/3/2014 6:25:06 PM	16592
Uranium	0.030	0.0010		mg/L	1	12/3/2014 4:14:25 PM	16592
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	12/2/2014 2:03:02 PM	16625
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 3:07:24 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Bis(2-ethylhexyl)phthalate	11	10	B	µg/L	1	11/25/2014 3:07:24 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507

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Received Date: 11/19/2014 4:00:00 PM

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EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 3:07:24 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 3:07:24 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 3:07:24 PM	16507
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
1-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2-Methylnaphthalene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Naphthalene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 3:07:24 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507

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Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Phenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 3:07:24 PM	16507
Surr: 2-Fluorophenol	77.4	17.6-104		%REC	1	11/25/2014 3:07:24 PM	16507
Surr: Phenol-d5	67.2	17.7-89.9		%REC	1	11/25/2014 3:07:24 PM	16507
Surr: 2,4,6-Tribromophenol	91.1	16.3-122		%REC	1	11/25/2014 3:07:24 PM	16507
Surr: Nitrobenzene-d5	89.9	45.3-117		%REC	1	11/25/2014 3:07:24 PM	16507
Surr: 2-Fluorobiphenyl	86.6	43-113		%REC	1	11/25/2014 3:07:24 PM	16507
Surr: 4-Terphenyl-d14	93.8	47.6-122		%REC	1	11/25/2014 3:07:24 PM	16507
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Toluene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Naphthalene	ND	2.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Acetone	ND	10		µg/L	1	11/24/2014 7:58:26 PM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Bromoform	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Bromomethane	ND	3.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
2-Butanone	ND	10		µg/L	1	11/24/2014 7:58:26 PM	R22767
Carbon disulfide	ND	10		µg/L	1	11/24/2014 7:58:26 PM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Chloroethane	ND	2.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Chloroform	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Chloromethane	ND	3.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
cis-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Client Sample ID: STP-1NW
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Matrix: AQUEOUS
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1-Dichloroethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1-Dichloroethene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
2-Hexanone	ND	10		µg/L	1	11/24/2014 7:58:26 PM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/24/2014 7:58:26 PM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Styrene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Vinyl chloride	ND	1.0		µg/L	1	11/24/2014 7:58:26 PM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/24/2014 7:58:26 PM	R22767

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1NW
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 1:15:00 PM
Lab ID: 1411835-006
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%REC	1	11/24/2014 7:58:26 PM	R22767
Surr: 4-Bromofluorobenzene	117	70-130		%REC	1	11/24/2014 7:58:26 PM	R22767
Surr: Dibromofluoromethane	102	70-130		%REC	1	11/24/2014 7:58:26 PM	R22767
Surr: Toluene-d8	110	70-130		%REC	1	11/24/2014 7:58:26 PM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-11-18-14
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 8:00:00 AM
Lab ID: 1411835-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Acenaphthylene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Aniline	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Anthracene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Azobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Benz(a)anthracene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Benzo(a)pyrene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Benzo(b)fluoranthene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Benzo(k)fluoranthene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Benzoic acid	ND	20		µg/L	1	11/25/2014 3:34:34 PM	16507
Benzyl alcohol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Bis(2-ethylhexyl)phthalate	12	10	B	µg/L	1	11/25/2014 3:34:34 PM	16507
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Butyl benzyl phthalate	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Carbazole	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
4-Chloroaniline	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2-Chloronaphthalene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2-Chlorophenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Chrysene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Di-n-butyl phthalate	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Di-n-octyl phthalate	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Dibenzofuran	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
1,2-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
1,3-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
1,4-Dichlorobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Diethyl phthalate	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Dimethyl phthalate	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2,4-Dichlorophenol	ND	20		µg/L	1	11/25/2014 3:34:34 PM	16507
2,4-Dimethylphenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/25/2014 3:34:34 PM	16507
2,4-Dinitrophenol	ND	20		µg/L	1	11/25/2014 3:34:34 PM	16507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-MKTF-11-18-14
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 8:00:00 AM
Lab ID: 1411835-007
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2,6-Dinitrotoluene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Fluoranthene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Fluorene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Hexachlorobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Hexachlorobutadiene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Hexachloroethane	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Isophorone	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
1-Methylnaphthalene	120	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2-Methylnaphthalene	36	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2-Methylphenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
3+4-Methylphenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
N-Nitrosodimethylamine	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Naphthalene	57	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2-Nitroaniline	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
3-Nitroaniline	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
4-Nitroaniline	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Nitrobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2-Nitrophenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
4-Nitrophenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Pentachlorophenol	ND	20		µg/L	1	11/25/2014 3:34:34 PM	16507
Phenanthrene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Phenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Pyrene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Pyridine	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/25/2014 3:34:34 PM	16507
Surr: 2-Fluorophenol	80.1	17.6-104		%REC	1	11/25/2014 3:34:34 PM	16507
Surr: Phenol-d5	70.7	17.7-89.9		%REC	1	11/25/2014 3:34:34 PM	16507
Surr: 2,4,6-Tribromophenol	102	16.3-122		%REC	1	11/25/2014 3:34:34 PM	16507
Surr: Nitrobenzene-d5	96.4	45.3-117		%REC	1	11/25/2014 3:34:34 PM	16507
Surr: 2-Fluorobiphenyl	92.6	43-113		%REC	1	11/25/2014 3:34:34 PM	16507
Surr: 4-Terphenyl-d14	89.8	47.6-122		%REC	1	11/25/2014 3:34:34 PM	16507

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 8:00:00 AM
Lab ID: 1411835-008
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Toluene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Naphthalene	ND	2.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Acetone	ND	10		µg/L	1	11/24/2014 8:25:11 PM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Bromoform	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Bromomethane	ND	3.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
2-Butanone	ND	10		µg/L	1	11/24/2014 8:25:11 PM	R22767
Carbon disulfide	ND	10		µg/L	1	11/24/2014 8:25:11 PM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Chloroethane	ND	2.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Chloroform	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Chloromethane	ND	3.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
cis-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,1-Dichloroethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,1-Dichloroethene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/24/2014 8:25:11 PM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date: 11/18/2014 8:00:00 AM
Lab ID: 1411835-008
Matrix: AQUEOUS
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
2-Hexanone	ND	10		µg/L	1	11/24/2014 8:25:11 PM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/24/2014 8:25:11 PM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Styrene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Vinyl chloride	ND	1.0		µg/L	1	11/24/2014 8:25:11 PM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/24/2014 8:25:11 PM	R22767
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	1	11/24/2014 8:25:11 PM	R22767
Surr: 4-Bromofluorobenzene	118	70-130		%REC	1	11/24/2014 8:25:11 PM	R22767
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	11/24/2014 8:25:11 PM	R22767
Surr: Toluene-d8	109	70-130		%REC	1	11/24/2014 8:25:11 PM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date:
Lab ID: 1411835-009
Matrix: TRIP BLANK
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Toluene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Ethylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Naphthalene	ND	2.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
2-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Acetone	ND	10		µg/L	1	11/24/2014 1:43:43 PM	R22767
Bromobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Bromodichloromethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Bromoform	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Bromomethane	ND	3.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
2-Butanone	ND	10		µg/L	1	11/24/2014 1:43:43 PM	R22767
Carbon disulfide	ND	10		µg/L	1	11/24/2014 1:43:43 PM	R22767
Carbon Tetrachloride	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Chlorobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Chloroethane	ND	2.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Chloroform	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Chloromethane	ND	3.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
2-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
4-Chlorotoluene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
cis-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Dibromochloromethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Dibromomethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,1-Dichloroethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,1-Dichloroethene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,3-Dichloropropane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
2,2-Dichloropropane	ND	2.0		µg/L	1	11/24/2014 1:43:43 PM	R22767

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2014 4th QTR MKTF WELLS/STP-1N
Collection Date:
Lab ID: 1411835-009
Matrix: TRIP BLANK
Received Date: 11/19/2014 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Hexachlorobutadiene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
2-Hexanone	ND	10		µg/L	1	11/24/2014 1:43:43 PM	R22767
Isopropylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
4-Isopropyltoluene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
4-Methyl-2-pentanone	ND	10		µg/L	1	11/24/2014 1:43:43 PM	R22767
Methylene Chloride	ND	3.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
n-Butylbenzene	ND	3.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
n-Propylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
sec-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Styrene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
tert-Butylbenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
trans-1,2-DCE	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Trichlorofluoromethane	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Vinyl chloride	ND	1.0		µg/L	1	11/24/2014 1:43:43 PM	R22767
Xylenes, Total	ND	1.5		µg/L	1	11/24/2014 1:43:43 PM	R22767
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	11/24/2014 1:43:43 PM	R22767
Surr: 4-Bromofluorobenzene	117	70-130		%REC	1	11/24/2014 1:43:43 PM	R22767
Surr: Dibromofluoromethane	105	70-130		%REC	1	11/24/2014 1:43:43 PM	R22767
Surr: Toluene-d8	109	70-130		%REC	1	11/24/2014 1:43:43 PM	R22767

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

Qualifiers:

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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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674626** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674627** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.2	85	115			
Cadmium	0.47	0.0020	0.5000	0	94.6	85	115			
Calcium	50	1.0	50.00	0	99.2	85	115			
Chromium	0.47	0.0060	0.5000	0	93.8	85	115			
Copper	0.46	0.0060	0.5000	0	92.3	85	115			
Iron	0.47	0.020	0.5000	0	93.2	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.46	0.0020	0.5000	0	91.1	85	115			
Potassium	48	1.0	50.00	0	96.9	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Sodium	49	1.0	50.00	0	98.8	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674628** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674628** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22857** RunNo: **22857**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **674629** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.6	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			
Copper	0.48	0.0060	0.5000	0	95.4	85	115			
Iron	0.48	0.020	0.5000	0	96.9	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.47	0.0020	0.5000	0	93.9	85	115			
Potassium	48	1.0	50.00	0	96.8	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	49	1.0	50.00	0	98.9	85	115			
Zinc	0.49	0.010	0.5000	0	97.3	85	115			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **MB-16592** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **16592** RunNo: **22823**
Prep Date: **11/26/2014** Analysis Date: **11/26/2014** SeqNo: **674320** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-16592** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **16592** RunNo: **22823**
Prep Date: **11/26/2014** Analysis Date: **11/26/2014** SeqNo: **674321** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	100	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.5	85	115			
Chromium	0.49	0.0060	0.5000	0	98.4	85	115			
Copper	0.49	0.0060	0.5000	0	98.7	85	115			
Iron	0.49	0.020	0.5000	0	98.7	85	115			
Manganese	0.48	0.0020	0.5000	0	97.0	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.50	0.010	0.5000	0	100	85	115			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677289** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.4	85	115			
Lead	0.024	0.0010	0.02500	0	97.8	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.025	0.0010	0.02500	0	99.9	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677290** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.024	0.0010	0.02500	0	96.7	85	115			
Selenium	0.024	0.0010	0.02500	0	95.5	85	115			
Uranium	0.023	0.0010	0.02500	0	92.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677291** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677292** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **1411835-006GMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **STP-1NW** Batch ID: **16592** RunNo: **22904**
Prep Date: **11/26/2014** Analysis Date: **12/3/2014** SeqNo: **676752** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0006461	104	70	130	1.53	20	
Uranium	0.056	0.0010	0.02500	0.02970	107	70	130	2.76	20	E

Sample ID **1411835-006GMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **STP-1NW** Batch ID: **16592** RunNo: **22904**
Prep Date: **11/26/2014** Analysis Date: **12/3/2014** SeqNo: **676753** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0006461	106	70	130			
Uranium	0.058	0.0010	0.02500	0.02970	113	70	130			E

Sample ID **LLLCS-16592** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **16592** RunNo: **22904**
Prep Date: **11/26/2014** Analysis Date: **12/3/2014** SeqNo: **676773** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.6	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.023	0.0010	0.02500	0	92.8	85	115			
Uranium	0.024	0.0010	0.02500	0	97.9	85	115			

Sample ID **MB-16592** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **16592** RunNo: **22904**
Prep Date: **11/26/2014** Analysis Date: **12/3/2014** SeqNo: **676775** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID	**MB-16625**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**16625**	RunNo:	**22882**
Prep Date:	**12/2/2014**	Analysis Date:	**12/2/2014**	SeqNo:	**675569** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-16625**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**16625**	RunNo:	**22882**
Prep Date:	**12/2/2014**	Analysis Date:	**12/2/2014**	SeqNo:	**675570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	107	80	120			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **1411835-006EMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **STP-1NW** Batch ID: **R22657** RunNo: **22657**
Prep Date: Analysis Date: **11/19/2014** SeqNo: **668270** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.65	0.10	0.5000	0.2920	72.3	66.1	113			
Bromide	4.8	0.10	2.500	2.776	81.5	82.5	103			S
Phosphorus, Orthophosphate (As P	4.1	0.50	5.000	0	82.6	69	109			

Sample ID **1411835-006EMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **STP-1NW** Batch ID: **R22657** RunNo: **22657**
Prep Date: Analysis Date: **11/19/2014** SeqNo: **668271** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.65	0.10	0.5000	0.2920	71.7	66.1	113	0.429	20	
Bromide	4.8	0.10	2.500	2.776	81.2	82.5	103	0.150	20	S
Phosphorus, Orthophosphate (As P	4.2	0.50	5.000	0	83.4	69	109	1.01	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22875** RunNo: **22875**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675391** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R22875** RunNo: **22875**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675392** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	97.0	90	110			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID	**MB-16493**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range**		
Client ID:	**PBW**	Batch ID:	**16493**	RunNo:	**22660**		
Prep Date:	**11/20/2014**	Analysis Date:	**11/21/2014**	SeqNo:	**669374**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.87		1.000		87.2	59	141			

Sample ID	**LCS-16493**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**		
Client ID:	**LCSW**	Batch ID:	**16493**	RunNo:	**22660**		
Prep Date:	**11/20/2014**	Analysis Date:	**11/21/2014**	SeqNo:	**669375**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	119	69.7	142			
Surr: DNOP	0.47		0.5000		93.2	59	141			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**		
Client ID:	**PBW**	Batch ID:	**R22716**	RunNo:	**22716**		
Prep Date:		Analysis Date:	**11/21/2014**	SeqNo:	**670112**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		92.8	80	120			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**		
Client ID:	**LCSW**	Batch ID:	**R22716**	RunNo:	**22716**		
Prep Date:		Analysis Date:	**11/21/2014**	SeqNo:	**670113**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	89.6	80	120			
Surr: BFB	19		20.00		94.0	80	120			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22767**	RunNo: **22767**			
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671611**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671611** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.1	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		141	70	130			S
Surr: Dibromofluoromethane	8.1		10.00		80.9	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	19	1.0	20.00	0	94.6	80	120			
Chlorobenzene	18	1.0	20.00	0	91.8	70	130			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	97.0	82.6	131			
Trichloroethene (TCE)	17	1.0	20.00	0	85.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		120	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.4	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID **1411835-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-16** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671626** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20000	50	1000	19490	79.6	70	130			E
Toluene	2200	50	1000	1166	102	70	130			
Chlorobenzene	1000	50	1000	0	101	70	130			
1,1-Dichloroethene	890	50	1000	0	88.8	70	130			
Trichloroethene (TCE)	880	50	1000	0	87.7	70	130			
Surr: 1,2-Dichloroethane-d4	470		500.0		93.2	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		97.1	70	130			
Surr: Dibromofluoromethane	460		500.0		91.4	70	130			
Surr: Toluene-d8	510		500.0		102	70	130			

Sample ID **1411835-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-16** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671627** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21000	50	1000	19490	126	70	130	2.25	20	E
Toluene	2100	50	1000	1166	91.3	70	130	5.18	20	
Chlorobenzene	960	50	1000	0	96.2	70	130	4.44	20	
1,1-Dichloroethene	890	50	1000	0	89.0	70	130	0.325	20	
Trichloroethene (TCE)	900	50	1000	0	90.1	70	130	2.64	20	
Surr: 1,2-Dichloroethane-d4	500		500.0		99.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		95.9	70	130	0	0	
Surr: Dibromofluoromethane	460		500.0		91.7	70	130	0	0	
Surr: Toluene-d8	500		500.0		99.2	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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671653** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	22	1.0	20.00	0	108	80	120			
Chlorobenzene	19	1.0	20.00	0	97.2	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.0	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	93.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **b5** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22767** RunNo: **22767**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671935** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R22767**	RunNo: **22767**	
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671935**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **b5**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22767**	RunNo: **22767**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671935** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.4	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22801**	RunNo: **22801**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672809** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								

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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22801**	RunNo: **22801**			
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672809**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		124	70	130			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22801** RunNo: **22801**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **672809** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.9	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22801** RunNo: **22801**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **672811** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	21	1.0	20.00	0	107	80	120			
Chlorobenzene	19	1.0	20.00	0	93.7	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.7	82.6	131			
Trichloroethene (TCE)	18	1.0	20.00	0	92.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.6	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **mb-16507**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16507**	RunNo: **22768**			
Prep Date: **11/21/2014**	Analysis Date: **11/24/2014**	SeqNo: **671719**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	14	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **mb-16507**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16507**	RunNo: **22768**			
Prep Date: **11/21/2014**	Analysis Date: **11/24/2014**	SeqNo: **671719**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	160		200.0		78.3	17.6	104			
Surr: Phenol-d5	160		200.0		81.6	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		89.3	16.3	122			
Surr: Nitrobenzene-d5	80		100.0		80.5	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		79.6	43	113			
Surr: 4-Terphenyl-d14	87		100.0		87.4	47.6	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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID **lcs-16507** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **16507** RunNo: **22768**
Prep Date: **11/21/2014** Analysis Date: **11/24/2014** SeqNo: **671720** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	79	10	100.0	0	78.9	47.9	114			
4-Chloro-3-methylphenol	180	10	200.0	0	89.2	51.7	122			
2-Chlorophenol	150	10	200.0	0	77.3	40.7	113			
1,4-Dichlorobenzene	66	10	100.0	0	66.0	39.6	99.9			
2,4-Dinitrotoluene	62	10	100.0	0	61.8	40.8	113			
N-Nitrosodi-n-propylamine	78	10	100.0	0	78.2	51.2	111			
4-Nitrophenol	160	10	200.0	0	80.2	15.7	86.9			
Pentachlorophenol	140	20	200.0	0	68.7	21.6	104			
Phenol	170	10	200.0	0	83.3	28.6	71.7			S
Pyrene	81	10	100.0	0	81.0	54.2	128			
1,2,4-Trichlorobenzene	71	10	100.0	0	71.1	40.9	101			
Surr: 2-Fluorophenol	140		200.0		70.0	17.6	104			
Surr: Phenol-d5	150		200.0		75.8	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		88.2	16.3	122			
Surr: Nitrobenzene-d5	80		100.0		79.8	45.3	117			
Surr: 2-Fluorobiphenyl	76		100.0		75.7	43	113			
Surr: 4-Terphenyl-d14	90		100.0		89.5	47.6	122			

Sample ID **lcsd-16507** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **16507** RunNo: **22768**
Prep Date: **11/21/2014** Analysis Date: **11/24/2014** SeqNo: **671721** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	90	10	100.0	0	89.8	47.9	114	13.0	27.2	
4-Chloro-3-methylphenol	190	10	200.0	0	95.3	51.7	122	6.67	25.9	
2-Chlorophenol	180	10	200.0	0	90.7	40.7	113	15.9	22.5	
1,4-Dichlorobenzene	81	10	100.0	0	80.5	39.6	99.9	19.9	24.6	
2,4-Dinitrotoluene	79	10	100.0	0	79.1	40.8	113	24.5	25.3	
N-Nitrosodi-n-propylamine	92	10	100.0	0	91.5	51.2	111	15.7	23.6	
4-Nitrophenol	180	10	200.0	0	91.4	15.7	86.9	13.1	34.7	S
Pentachlorophenol	160	20	200.0	0	78.2	21.6	104	12.9	32.8	
Phenol	190	10	200.0	0	96.4	28.6	71.7	14.5	25.5	S
Pyrene	93	10	100.0	0	93.4	54.2	128	14.3	31.4	
1,2,4-Trichlorobenzene	80	10	100.0	0	80.1	40.9	101	11.9	25.9	
Surr: 2-Fluorophenol	160		200.0		79.0	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		83.5	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.6	16.3	122	0	0	
Surr: Nitrobenzene-d5	81		100.0		81.2	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	80		100.0		80.4	43	113	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.
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#: **1411835**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: 2014 4th QTR MKTF WELLS/STP-1NW

Sample ID	**lcsd-16507**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**16507**	RunNo:	**22768**
Prep Date:	**11/21/2014**	Analysis Date:	**11/24/2014**	SeqNo:	**671721** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	93		100.0		93.3	47.6	122	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1411835 RcptNo: 1

Received by/date: CS 11/19/14

Logged By: **Celina Sessa** 11/19/2014 4:00:00 PM Celina Sessa

Completed By: **Ashley Gallegos** 11/20/2014 9:43:26 AM AG

Reviewed By: mg CS 11/20/14

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° 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 ☑ mg 11/20/14 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 18 (<2 or >12 unless noted)
Adjusted? YES
Checked by: mg CS

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: For diss. metals analysis, poured off from the Amber jar + filtered into a 125m bottle, added 0.4ml HNO_3 for acceptable pH (for -005F). For Dissolved Metals: Added 0.4 mL HNO_3 to 002F, 003F, 004F for acceptable pH. Held in login for 24hrs. after preservation. For Total Metals Added 1mL HNO_3 to 001G for acceptable pH. Held in login [illegible]

18. **Cooler Information**

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

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2014 4th QTR MKTF WELLS/STP-1NW

(MKTF 16-20 & STP-1NW)

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411835	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major Cations/Anions									Air Bubbles (Y or N)
11/18/2014	955	AQUEOUS	MKTF-16	MISC	HCL	-001	X	X	X	X	X	X									
11/18/2014	1415	AQUEOUS	MKTF-17	MISC	HCL	-002	X	X	X	X	X	X									
11/18/2014	1615	AQUEOUS	MKTF-18	MISC	HCL	-003	X	X	X	X	X	X									
11/18/2014	1430	AQUEOUS	MKTF-19	MISC	HCL	-004	X	X	X	X	X	X									
11/18/2014	1015	AQUEOUS	MKTF-20	MISC	HCL	-005	X	X	X	X		X									
				MISC	HCL	-01															
11/18/2014	1315	AQUEOUS	STP-1NW	MISC	HCL	-006	X	X	X	X	X	X									
11/18/2014		AQUEOUS	BD-MKTF-11-18-14	1L AMBER	NONE	-007			X												
11/18/2014	0800	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	-008	X														
11/18/2014	0800	AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-009	X														

Date:	Time:	Relinquished by:	Received by:	Date Time
11/19/2014	1:30			11/19/14 2:00
Date:	Time:	Relinquished by:	Received by:	Date Time
11/19/14	4:00		Celina Sanz	11/19/14 1600

Remarks: MKTF 20 - No sample for the Filtered WQCC Metals (Not enough water)

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.

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

December 11, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q4 2014 OrderNo.: 1411590

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 11/15/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1411590**
Date Reported: **12/11/2014**

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Q4 2014
Collection Date: 11/14/2014 10:10:00 AM
Lab ID: 1411590-001
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	74	10		mg/L	10	11/18/2014 11:43:11 PM	16415
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	11/18/2014 11:43:11 PM	16415
Surr: DNOP	0	59-141	S	%REC	10	11/18/2014 11:43:11 PM	16415
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	84	2.5	P	mg/L	50	11/17/2014 6:07:14 PM	R22597
Surr: BFB	106	80-120	P	%REC	50	11/17/2014 6:07:14 PM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	270	10	*	mg/L	100	11/17/2014 4:20:46 PM	R22603
Chloride	260	50		mg/L	100	11/17/2014 4:20:46 PM	R22603
Bromide	ND	1.0		mg/L	10	11/17/2014 4:08:21 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 4:08:21 PM	R22603
Sulfate	ND	5.0		mg/L	10	11/17/2014 4:08:21 PM	R22603
Nitrate+Nitrite as N	ND	2.0		mg/L	10	12/1/2014 10:17:27 PM	R22875
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	17	0.20	*	mg/L	100	11/25/2014 2:18:12 PM	R22813
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:11:29 PM	R22755
Calcium	780	10		mg/L	10	11/25/2014 2:16:23 PM	R22813
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:11:29 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:11:29 PM	R22755
Iron	67	2.0	*	mg/L	100	11/25/2014 2:18:12 PM	R22813
Magnesium	220	5.0		mg/L	5	11/24/2014 6:13:16 PM	R22755
Manganese	24	0.20	*	mg/L	100	11/25/2014 2:18:12 PM	R22813
Potassium	2.5	1.0		mg/L	1	11/24/2014 6:11:29 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:11:29 PM	R22755
Sodium	550	10		mg/L	10	11/25/2014 2:16:23 PM	R22813
Zinc	0.018	0.010		mg/L	1	11/24/2014 6:11:29 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	45	0.40	*	mg/L	100	11/21/2014 5:03:16 PM	16487
Cadmium	ND	0.0040		mg/L	1	11/20/2014 6:11:36 PM	16487
Chromium	0.099	0.012		mg/L	1	11/20/2014 6:11:36 PM	16487
Copper	0.24	0.012		mg/L	1	11/20/2014 6:11:36 PM	16487
Iron	250	8.0	*	mg/L	200	11/24/2014 11:38:56 AM	16487
Manganese	49	0.40	*	mg/L	100	11/21/2014 5:03:16 PM	16487
Silver	ND	0.010		mg/L	1	11/20/2014 6:11:36 PM	16487
Zinc	0.31	0.020		mg/L	1	11/20/2014 6:11:36 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/1/2014 3:49:28 PM	R22871

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Q4 2014
Collection Date: 11/14/2014 10:10:00 AM
Lab ID: 1411590-001
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.010		mg/L	10	12/1/2014 3:49:28 PM	R22871
Selenium	ND	0.010		mg/L	10	12/1/2014 3:49:28 PM	R22871
Uranium	ND	0.010		mg/L	10	12/1/2014 5:25:40 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.040	*	mg/L	20	12/3/2014 3:06:29 PM	16487
Lead	0.58	0.040	*	mg/L	20	12/3/2014 3:06:29 PM	16487
Selenium	ND	0.040		mg/L	20	12/3/2014 3:06:29 PM	16487
Uranium	0.052	0.040	*	mg/L	20	12/3/2014 3:06:29 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00040		mg/L	1	11/26/2014 3:28:18 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Aniline	54	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 5:48:20 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Bis(2-ethylhexyl)phthalate	10	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Q4 2014
Collection Date: 11/14/2014 10:10:00 AM
Lab ID: 1411590-001
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 5:48:20 PM	16427
2,4-Dimethylphenol	63	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 5:48:20 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 5:48:20 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
1-Methylnaphthalene	46	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2-Methylnaphthalene	51	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2-Methylphenol	330	50		µg/L	5	11/20/2014 12:02:04 PM	16427
3+4-Methylphenol	400	50		µg/L	5	11/20/2014 12:02:04 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Naphthalene	99	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 5:48:20 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Phenol	290	50		µg/L	5	11/20/2014 12:02:04 PM	16427

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Q4 2014
Collection Date: 11/14/2014 10:10:00 AM
Lab ID: 1411590-001
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 5:48:20 PM	16427
Surr: 2-Fluorophenol	23.4	17.6-104		%REC	1	11/19/2014 5:48:20 PM	16427
Surr: Phenol-d5	48.6	17.7-89.9		%REC	1	11/19/2014 5:48:20 PM	16427
Surr: 2,4,6-Tribromophenol	68.3	16.3-122		%REC	1	11/19/2014 5:48:20 PM	16427
Surr: Nitrobenzene-d5	67.8	45.3-117		%REC	1	11/19/2014 5:48:20 PM	16427
Surr: 2-Fluorobiphenyl	65.8	43-113		%REC	1	11/19/2014 5:48:20 PM	16427
Surr: 4-Terphenyl-d14	60.7	47.6-122		%REC	1	11/19/2014 5:48:20 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	11000	200	P	µg/L	200	11/17/2014 7:05:41 PM	R22601
Toluene	20000	500	P	µg/L	500	11/18/2014 11:22:33 AM	R22619
Ethylbenzene	1700	200	P	µg/L	200	11/17/2014 7:05:41 PM	R22601
Methyl tert-butyl ether (MTBE)	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2,4-Trimethylbenzene	1500	200	P	µg/L	200	11/17/2014 7:05:41 PM	R22601
1,3,5-Trimethylbenzene	570	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2-Dichloroethane (EDC)	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2-Dibromoethane (EDB)	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Naphthalene	360	40	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1-Methylnaphthalene	240	80	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
2-Methylnaphthalene	380	80	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Acetone	ND	200	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Bromobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Bromodichloromethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Bromoform	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Bromomethane	ND	60	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
2-Butanone	ND	200	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Carbon disulfide	ND	200	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Carbon Tetrachloride	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Chlorobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Chloroethane	ND	40	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Chloroform	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Chloromethane	ND	60	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
2-Chlorotoluene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
4-Chlorotoluene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
cis-1,2-DCE	66	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
cis-1,3-Dichloropropene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Q4 2014
Collection Date: 11/14/2014 10:10:00 AM
Lab ID: 1411590-001
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	40	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Dibromochloromethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Dibromomethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2-Dichlorobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,3-Dichlorobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,4-Dichlorobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Dichlorodifluoromethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1-Dichloroethane	39	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1-Dichloroethene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2-Dichloropropane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,3-Dichloropropane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
2,2-Dichloropropane	ND	40	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1-Dichloropropene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Hexachlorobutadiene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
2-Hexanone	ND	200	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Isopropylbenzene	120	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
4-Isopropyltoluene	34	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
4-Methyl-2-pentanone	ND	200	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Methylene Chloride	ND	60	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
n-Butylbenzene	84	60	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
n-Propylbenzene	360	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
sec-Butylbenzene	40	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Styrene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
tert-Butylbenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1,1,2-Tetrachloroethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1,2,2-Tetrachloroethane	ND	40	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Tetrachloroethene (PCE)	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
trans-1,2-DCE	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
trans-1,3-Dichloropropene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2,3-Trichlorobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2,4-Trichlorobenzene	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1,1-Trichloroethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,1,2-Trichloroethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Trichloroethene (TCE)	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Trichlorofluoromethane	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
1,2,3-Trichloropropane	ND	40	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Vinyl chloride	ND	20	P	µg/L	20	11/17/2014 7:32:28 PM	R22601
Xylenes, Total	7600	300	P	µg/L	200	11/17/2014 7:05:41 PM	R22601
Surr: 1,2-Dichloroethane-d4	99.3	70-130	P	%REC	20	11/17/2014 7:32:28 PM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: Q4 2014
Collection Date: 11/14/2014 10:10:00 AM
Lab ID: 1411590-001
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	92.2	70-130	P	%REC	20	11/17/2014 7:32:28 PM	R22601
Surr: Dibromofluoromethane	81.3	70-130	P	%REC	20	11/17/2014 7:32:28 PM	R22601
Surr: Toluene-d8	95.5	70-130	P	%REC	20	11/17/2014 7:32:28 PM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Q4 2014
Collection Date: 11/14/2014 10:13:00 AM
Lab ID: 1411590-002
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	2.1	1.0		mg/L	1	11/19/2014 12:12:35 AM	16415
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 12:12:35 AM	16415
Surr: DNOP	109	59-141		%REC	1	11/19/2014 12:12:35 AM	16415
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	4.4	0.50		mg/L	10	11/17/2014 7:29:15 PM	R22597
Surr: BFB	98.2	80-120		%REC	10	11/17/2014 7:29:15 PM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 4:33:12 PM	R22603
Chloride	180	50		mg/L	100	11/17/2014 5:10:26 PM	R22603
Bromide	1.2	1.0		mg/L	10	11/17/2014 4:33:12 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 4:33:12 PM	R22603
Sulfate	140	5.0		mg/L	10	11/17/2014 4:33:12 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 10:29:10 AM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.34	0.0020		mg/L	1	11/24/2014 6:14:52 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:14:52 PM	R22755
Calcium	160	5.0		mg/L	5	11/24/2014 6:16:29 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:14:52 PM	R22755
Copper	ND	0.030		mg/L	5	11/24/2014 6:16:29 PM	R22755
Iron	2.4	0.10	*	mg/L	5	11/24/2014 6:16:29 PM	R22755
Magnesium	30	1.0		mg/L	1	11/24/2014 6:14:52 PM	R22755
Manganese	2.8	0.010	*	mg/L	5	11/24/2014 6:16:29 PM	R22755
Potassium	ND	1.0		mg/L	1	11/24/2014 6:14:52 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:14:52 PM	R22755
Sodium	240	5.0		mg/L	5	11/24/2014 6:16:29 PM	R22755
Zinc	0.017	0.010		mg/L	1	11/24/2014 6:14:52 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.39	0.0020		mg/L	1	11/20/2014 6:22:30 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:22:30 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:22:30 PM	16487
Copper	ND	0.0060		mg/L	1	11/20/2014 6:22:30 PM	16487
Iron	4.5	0.20	*	mg/L	10	11/21/2014 5:29:32 PM	16487
Manganese	2.7	0.010	*	mg/L	5	11/21/2014 5:24:02 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:22:30 PM	16487
Zinc	0.013	0.010		mg/L	1	11/20/2014 6:22:30 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/1/2014 3:52:34 PM	R22871

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Q4 2014
Collection Date: 11/14/2014 10:13:00 AM
Lab ID: 1411590-002
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.010		mg/L	10	12/1/2014 3:52:34 PM	R22871
Selenium	ND	0.010		mg/L	10	12/1/2014 3:52:34 PM	R22871
Uranium	ND	0.010		mg/L	10	12/1/2014 5:28:46 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	11/26/2014 6:13:52 PM	16487
Lead	0.0053	0.0050		mg/L	5	11/26/2014 6:13:52 PM	16487
Selenium	ND	0.010		mg/L	10	12/3/2014 3:09:35 PM	16487
Uranium	0.010	0.010		mg/L	10	12/3/2014 3:09:35 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 2:50:05 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 6:15:53 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Bis(2-ethylhexyl)phthalate	11	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Q4 2014
Collection Date: 11/14/2014 10:13:00 AM
Lab ID: 1411590-002
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 6:15:53 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 6:15:53 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 6:15:53 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
1-Methylnaphthalene	49	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Naphthalene	21	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 6:15:53 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Q4 2014
Collection Date: 11/14/2014 10:13:00 AM
Lab ID: 1411590-002
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 6:15:53 PM	16427
Surr: 2-Fluorophenol	74.6	17.6-104		%REC	1	11/19/2014 6:15:53 PM	16427
Surr: Phenol-d5	65.2	17.7-89.9		%REC	1	11/19/2014 6:15:53 PM	16427
Surr: 2,4,6-Tribromophenol	95.7	16.3-122		%REC	1	11/19/2014 6:15:53 PM	16427
Surr: Nitrobenzene-d5	84.3	45.3-117		%REC	1	11/19/2014 6:15:53 PM	16427
Surr: 2-Fluorobiphenyl	85.2	43-113		%REC	1	11/19/2014 6:15:53 PM	16427
Surr: 4-Terphenyl-d14	91.2	47.6-122		%REC	1	11/19/2014 6:15:53 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	810	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Toluene	33	10		µg/L	10	11/18/2014 11:49:20 AM	R22619
Ethylbenzene	150	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Methyl tert-butyl ether (MTBE)	770	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2,4-Trimethylbenzene	87	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Naphthalene	43	20		µg/L	10	11/17/2014 9:46:35 PM	R22601
1-Methylnaphthalene	110	40		µg/L	10	11/17/2014 9:46:35 PM	R22601
2-Methylnaphthalene	ND	40		µg/L	10	11/17/2014 9:46:35 PM	R22601
Acetone	ND	100		µg/L	10	11/17/2014 9:46:35 PM	R22601
Bromobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Bromodichloromethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Bromoform	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Bromomethane	ND	30		µg/L	10	11/17/2014 9:46:35 PM	R22601
2-Butanone	ND	100		µg/L	10	11/17/2014 9:46:35 PM	R22601
Carbon disulfide	ND	100		µg/L	10	11/17/2014 9:46:35 PM	R22601
Carbon Tetrachloride	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Chlorobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Chloroethane	ND	20		µg/L	10	11/17/2014 9:46:35 PM	R22601
Chloroform	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Chloromethane	ND	30		µg/L	10	11/17/2014 9:46:35 PM	R22601
2-Chlorotoluene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
4-Chlorotoluene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
cis-1,2-DCE	24	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601

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Hall Environmental Analysis Laboratory, Inc.

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Collection Date: 11/14/2014 10:13:00 AM
Lab ID: 1411590-002
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/17/2014 9:46:35 PM	R22601
Dibromochloromethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Dibromomethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2-Dichlorobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,3-Dichlorobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,4-Dichlorobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Dichlorodifluoromethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1-Dichloroethane	35	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1-Dichloroethene	68	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2-Dichloropropane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,3-Dichloropropane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
2,2-Dichloropropane	ND	20		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1-Dichloropropene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Hexachlorobutadiene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
2-Hexanone	ND	100		µg/L	10	11/17/2014 9:46:35 PM	R22601
Isopropylbenzene	14	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
4-Isopropyltoluene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
4-Methyl-2-pentanone	ND	100		µg/L	10	11/17/2014 9:46:35 PM	R22601
Methylene Chloride	ND	30		µg/L	10	11/17/2014 9:46:35 PM	R22601
n-Butylbenzene	ND	30		µg/L	10	11/17/2014 9:46:35 PM	R22601
n-Propylbenzene	30	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
sec-Butylbenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Styrene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
tert-Butylbenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/17/2014 9:46:35 PM	R22601
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
trans-1,2-DCE	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1,1-Trichloroethane	96	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,1,2-Trichloroethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Trichloroethene (TCE)	11	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Trichlorofluoromethane	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
1,2,3-Trichloropropane	ND	20		µg/L	10	11/17/2014 9:46:35 PM	R22601
Vinyl chloride	ND	10		µg/L	10	11/17/2014 9:46:35 PM	R22601
Xylenes, Total	110	15		µg/L	10	11/17/2014 9:46:35 PM	R22601
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	10	11/17/2014 9:46:35 PM	R22601

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-09
Project: Q4 2014
Collection Date: 11/14/2014 10:13:00 AM
Lab ID: 1411590-002
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	10	11/17/2014 9:46:35 PM	R22601
Surr: Dibromofluoromethane	93.9	70-130		%REC	10	11/17/2014 9:46:35 PM	R22601
Surr: Toluene-d8	98.1	70-130		%REC	10	11/17/2014 9:46:35 PM	R22601

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Q4 2014
Collection Date: 11/14/2014 11:45:00 AM
Lab ID: 1411590-003
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/17/2014 6:02:42 PM	16411
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/17/2014 6:02:42 PM	16411
Surr: DNOP	125	59-141		%REC	1	11/17/2014 6:02:42 PM	16411
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.61	0.050		mg/L	1	11/18/2014 12:32:38 PM	R22618
Surr: BFB	95.0	80-120		%REC	1	11/18/2014 12:32:38 PM	R22618
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 5:22:51 PM	R22603
Chloride	830	50		mg/L	100	11/17/2014 5:35:16 PM	R22603
Bromide	1.2	1.0		mg/L	10	11/17/2014 5:22:51 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 5:22:51 PM	R22603
Sulfate	230	5.0		mg/L	10	11/17/2014 5:22:51 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 10:41:35 AM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	11/24/2014 6:18:28 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:18:28 PM	R22755
Calcium	100	5.0		mg/L	5	11/24/2014 6:20:25 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:18:28 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:18:28 PM	R22755
Iron	2.2	0.10	*	mg/L	5	11/24/2014 6:20:25 PM	R22755
Magnesium	16	1.0		mg/L	1	11/24/2014 6:18:28 PM	R22755
Manganese	0.51	0.0020	*	mg/L	1	11/24/2014 6:18:28 PM	R22755
Potassium	4.2	1.0		mg/L	1	11/24/2014 6:18:28 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:18:28 PM	R22755
Sodium	760	10		mg/L	10	11/25/2014 2:20:19 PM	R22813
Zinc	0.027	0.010		mg/L	1	11/24/2014 6:18:28 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.22	0.0020		mg/L	1	11/20/2014 6:27:53 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:27:53 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:27:53 PM	16487
Copper	0.012	0.0060		mg/L	1	11/20/2014 6:27:53 PM	16487
Iron	7.0	0.20	*	mg/L	10	11/21/2014 5:31:27 PM	16487
Manganese	0.68	0.0020	*	mg/L	1	11/20/2014 6:27:53 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:27:53 PM	16487
Zinc	0.030	0.010		mg/L	1	11/20/2014 6:27:53 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/1/2014 3:55:40 PM	R22871

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Q4 2014
Collection Date: 11/14/2014 11:45:00 AM
Lab ID: 1411590-003
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.010		mg/L	10	12/1/2014 3:55:40 PM	R22871
Selenium	ND	0.010		mg/L	10	12/1/2014 3:55:40 PM	R22871
Uranium	0.059	0.010	*	mg/L	10	12/1/2014 5:31:52 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0059	0.0050		mg/L	5	11/26/2014 6:17:22 PM	16487
Lead	0.0079	0.0050		mg/L	5	11/26/2014 6:17:22 PM	16487
Selenium	ND	0.010		mg/L	10	12/3/2014 3:12:41 PM	16487
Uranium	0.073	0.010	*	mg/L	10	12/3/2014 3:12:41 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 2:51:52 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 6:43:21 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Bis(2-ethylhexyl)phthalate	11	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 6:43:21 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 6:43:21 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 6:43:21 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 6:43:21 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Pyrene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 6:43:21 PM	16427
Surr: 2-Fluorophenol	73.5	17.6-104		%REC	1	11/19/2014 6:43:21 PM	16427
Surr: Phenol-d5	64.8	17.7-89.9		%REC	1	11/19/2014 6:43:21 PM	16427
Surr: 2,4,6-Tribromophenol	90.6	16.3-122		%REC	1	11/19/2014 6:43:21 PM	16427
Surr: Nitrobenzene-d5	88.7	45.3-117		%REC	1	11/19/2014 6:43:21 PM	16427
Surr: 2-Fluorobiphenyl	84.7	43-113		%REC	1	11/19/2014 6:43:21 PM	16427
Surr: 4-Terphenyl-d14	94.4	47.6-122		%REC	1	11/19/2014 6:43:21 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	200	10		µg/L	10	11/17/2014 10:13:25 PM	R22601
Toluene	2.2	1.0		µg/L	1	11/18/2014 12:16:04 PM	R22619
Ethylbenzene	2.9	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Methyl tert-butyl ether (MTBE)	59	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2,4-Trimethylbenzene	2.1	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2-Dichloroethane (EDC)	16	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Naphthalene	ND	2.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Acetone	ND	10		µg/L	1	11/17/2014 10:40:11 PM	R22601
Bromobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Bromoform	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Bromomethane	ND	3.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
2-Butanone	ND	10		µg/L	1	11/17/2014 10:40:11 PM	R22601
Carbon disulfide	ND	10		µg/L	1	11/17/2014 10:40:11 PM	R22601
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Chlorobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Chloroethane	ND	2.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Chloroform	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Chloromethane	ND	3.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
cis-1,2-DCE	11	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601

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Matrix: AQUEOUS
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Dibromomethane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1-Dichloroethane	75	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1-Dichloroethene	78	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
2-Hexanone	ND	10		µg/L	1	11/17/2014 10:40:11 PM	R22601
Isopropylbenzene	1.6	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2014 10:40:11 PM	R22601
Methylene Chloride	ND	3.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
n-Propylbenzene	1.2	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Styrene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1,1-Trichloroethane	3.6	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,1,2-Trichloroethane	2.4	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Trichloroethene (TCE)	7.1	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Vinyl chloride	9.7	1.0		µg/L	1	11/17/2014 10:40:11 PM	R22601
Xylenes, Total	1.6	1.5		µg/L	1	11/17/2014 10:40:11 PM	R22601
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	11/17/2014 10:40:11 PM	R22601

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-02
Project: Q4 2014
Collection Date: 11/14/2014 11:45:00 AM
Lab ID: 1411590-003
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	11/17/2014 10:40:11 PM	R22601
Surr: Dibromofluoromethane	95.3	70-130		%REC	1	11/17/2014 10:40:11 PM	R22601
Surr: Toluene-d8	98.2	70-130		%REC	1	11/17/2014 10:40:11 PM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-111414
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-004
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 7:10:35 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 7:10:35 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 7:10:35 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 7:10:35 PM	16427

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-111414
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-004
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 7:10:35 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 7:10:35 PM	16427
Surr: 2-Fluorophenol	85.6	17.6-104		%REC	1	11/19/2014 7:10:35 PM	16427
Surr: Phenol-d5	71.0	17.7-89.9		%REC	1	11/19/2014 7:10:35 PM	16427
Surr: 2,4,6-Tribromophenol	108	16.3-122		%REC	1	11/19/2014 7:10:35 PM	16427
Surr: Nitrobenzene-d5	94.4	45.3-117		%REC	1	11/19/2014 7:10:35 PM	16427
Surr: 2-Fluorobiphenyl	89.3	43-113		%REC	1	11/19/2014 7:10:35 PM	16427
Surr: 4-Terphenyl-d14	110	47.6-122		%REC	1	11/19/2014 7:10:35 PM	16427

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-111414
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-005
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 7:38:01 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 7:38:01 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 7:38:01 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 7:38:01 PM	16427

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BD-111414
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-005
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 7:38:01 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 7:38:01 PM	16427
Surr: 2-Fluorophenol	76.0	17.6-104		%REC	1	11/19/2014 7:38:01 PM	16427
Surr: Phenol-d5	65.2	17.7-89.9		%REC	1	11/19/2014 7:38:01 PM	16427
Surr: 2,4,6-Tribromophenol	79.5	16.3-122		%REC	1	11/19/2014 7:38:01 PM	16427
Surr: Nitrobenzene-d5	88.7	45.3-117		%REC	1	11/19/2014 7:38:01 PM	16427
Surr: 2-Fluorobiphenyl	84.0	43-113		%REC	1	11/19/2014 7:38:01 PM	16427
Surr: 4-Terphenyl-d14	82.8	47.6-122		%REC	1	11/19/2014 7:38:01 PM	16427

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Q4 2014
Collection Date: 11/14/2014 12:48:00 PM
Lab ID: 1411590-006
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/17/2014 6:23:50 PM	16411
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/17/2014 6:23:50 PM	16411
Surr: DNOP	133	59-141		%REC	1	11/17/2014 6:23:50 PM	16411
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2.0	0.25		mg/L	5	11/18/2014 12:29:17 AM	R22597
Surr: BFB	92.0	80-120		%REC	5	11/18/2014 12:29:17 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 5:47:40 PM	R22603
Chloride	1500	50		mg/L	100	11/17/2014 6:00:04 PM	R22603
Bromide	1.2	1.0		mg/L	10	11/17/2014 5:47:40 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 5:47:40 PM	R22603
Sulfate	160	5.0		mg/L	10	11/17/2014 5:47:40 PM	R22603
Nitrate+Nitrite as N	ND	2.0		mg/L	10	11/26/2014 10:53:59 AM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	11/24/2014 6:22:52 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:22:52 PM	R22755
Calcium	190	5.0		mg/L	5	11/24/2014 6:24:44 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:22:52 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:22:52 PM	R22755
Iron	0.18	0.020		mg/L	1	11/24/2014 6:22:52 PM	R22755
Magnesium	31	1.0		mg/L	1	11/24/2014 6:22:52 PM	R22755
Manganese	1.4	0.010	*	mg/L	5	11/24/2014 6:24:44 PM	R22755
Potassium	4.3	1.0		mg/L	1	11/24/2014 6:22:52 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:22:52 PM	R22755
Sodium	920	20		mg/L	20	11/25/2014 2:22:12 PM	R22813
Zinc	0.014	0.010		mg/L	1	11/24/2014 6:22:52 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.15	0.0020		mg/L	1	11/20/2014 6:29:54 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:29:54 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:29:54 PM	16487
Copper	ND	0.0060		mg/L	1	11/20/2014 6:29:54 PM	16487
Iron	1.3	0.10	*	mg/L	5	11/21/2014 5:33:25 PM	16487
Manganese	1.4	0.010	*	mg/L	5	11/21/2014 5:33:25 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:29:54 PM	16487
Zinc	0.014	0.010		mg/L	1	11/20/2014 6:29:54 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/1/2014 3:58:46 PM	R22871

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Q4 2014
Collection Date: 11/14/2014 12:48:00 PM
Lab ID: 1411590-006
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.010		mg/L	10	12/1/2014 3:58:46 PM	R22871
Selenium	ND	0.010		mg/L	10	12/1/2014 3:58:46 PM	R22871
Uranium	0.066	0.010	*	mg/L	10	12/1/2014 5:34:58 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	11/26/2014 6:20:52 PM	16487
Lead	ND	0.0050		mg/L	5	11/26/2014 6:20:52 PM	16487
Selenium	ND	0.010		mg/L	10	12/3/2014 3:15:46 PM	16487
Uranium	0.077	0.010	*	mg/L	10	12/3/2014 3:15:46 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 2:53:39 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 8:05:26 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Q4 2014
Collection Date: 11/14/2014 12:48:00 PM
Lab ID: 1411590-006
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 8:05:26 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 8:05:26 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 8:05:26 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 8:05:26 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427

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Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Q4 2014
Collection Date: 11/14/2014 12:48:00 PM
Lab ID: 1411590-006
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 8:05:26 PM	16427
Surr: 2-Fluorophenol	49.8	17.6-104		%REC	1	11/19/2014 8:05:26 PM	16427
Surr: Phenol-d5	48.4	17.7-89.9		%REC	1	11/19/2014 8:05:26 PM	16427
Surr: 2,4,6-Tribromophenol	76.8	16.3-122		%REC	1	11/19/2014 8:05:26 PM	16427
Surr: Nitrobenzene-d5	59.5	45.3-117		%REC	1	11/19/2014 8:05:26 PM	16427
Surr: 2-Fluorobiphenyl	64.8	43-113		%REC	1	11/19/2014 8:05:26 PM	16427
Surr: 4-Terphenyl-d14	86.8	47.6-122		%REC	1	11/19/2014 8:05:26 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	970	50		µg/L	50	11/18/2014 1:47:54 AM	R22601
Toluene	11	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Ethylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Methyl tert-butyl ether (MTBE)	94	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2-Dichloroethane (EDC)	9.3	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Naphthalene	ND	10		µg/L	5	11/18/2014 12:42:56 PM	R22619
1-Methylnaphthalene	ND	20		µg/L	5	11/18/2014 12:42:56 PM	R22619
2-Methylnaphthalene	ND	20		µg/L	5	11/18/2014 12:42:56 PM	R22619
Acetone	ND	50		µg/L	5	11/18/2014 12:42:56 PM	R22619
Bromobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Bromodichloromethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Bromoform	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Bromomethane	ND	15		µg/L	5	11/18/2014 12:42:56 PM	R22619
2-Butanone	ND	50		µg/L	5	11/18/2014 12:42:56 PM	R22619
Carbon disulfide	ND	50		µg/L	5	11/18/2014 12:42:56 PM	R22619
Carbon Tetrachloride	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Chlorobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Chloroethane	ND	10		µg/L	5	11/18/2014 12:42:56 PM	R22619
Chloroform	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Chloromethane	ND	15		µg/L	5	11/18/2014 12:42:56 PM	R22619
2-Chlorotoluene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
4-Chlorotoluene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
cis-1,2-DCE	11	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Q4 2014
Collection Date: 11/14/2014 12:48:00 PM
Lab ID: 1411590-006
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	11/18/2014 12:42:56 PM	R22619
Dibromochloromethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Dibromomethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2-Dichlorobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,3-Dichlorobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,4-Dichlorobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Dichlorodifluoromethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1-Dichloroethane	83	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1-Dichloroethene	43	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2-Dichloropropane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,3-Dichloropropane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
2,2-Dichloropropane	ND	10		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1-Dichloropropene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Hexachlorobutadiene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
2-Hexanone	ND	50		µg/L	5	11/18/2014 12:42:56 PM	R22619
Isopropylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
4-Isopropyltoluene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
4-Methyl-2-pentanone	ND	50		µg/L	5	11/18/2014 12:42:56 PM	R22619
Methylene Chloride	ND	15		µg/L	5	11/18/2014 12:42:56 PM	R22619
n-Butylbenzene	ND	15		µg/L	5	11/18/2014 12:42:56 PM	R22619
n-Propylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
sec-Butylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Styrene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
tert-Butylbenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	11/18/2014 12:42:56 PM	R22619
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
trans-1,2-DCE	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1,1-Trichloroethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,1,2-Trichloroethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Trichloroethene (TCE)	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Trichlorofluoromethane	ND	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
1,2,3-Trichloropropane	ND	10		µg/L	5	11/18/2014 12:42:56 PM	R22619
Vinyl chloride	17	5.0		µg/L	5	11/18/2014 12:42:56 PM	R22619
Xylenes, Total	ND	7.5		µg/L	5	11/18/2014 12:42:56 PM	R22619
Surr: 1,2-Dichloroethane-d4	112	70-130		%REC	5	11/18/2014 12:42:56 PM	R22619

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Qualifiers:

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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
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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: Q4 2014
Collection Date: 11/14/2014 12:48:00 PM
Lab ID: 1411590-006
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	124	70-130		%REC	5	11/18/2014 12:42:56 PM	R22619
Surr: Dibromofluoromethane	102	70-130		%REC	5	11/18/2014 12:42:56 PM	R22619
Surr: Toluene-d8	101	70-130		%REC	5	11/18/2014 12:42:56 PM	R22619

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Q4 2014
Collection Date: 11/14/2014 12:21:00 PM
Lab ID: 1411590-007
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/17/2014 6:44:47 PM	16411
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/17/2014 6:44:47 PM	16411
Surr: DNOP	135	59-141		%REC	1	11/17/2014 6:44:47 PM	16411
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/18/2014 12:56:37 AM	R22597
Surr: BFB	85.0	80-120		%REC	1	11/18/2014 12:56:37 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 6:37:18 PM	R22603
Chloride	2500	100		mg/L	200	12/1/2014 9:27:48 PM	R22875
Bromide	1.8	1.0		mg/L	10	11/17/2014 6:37:18 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 6:37:18 PM	R22603
Sulfate	470	50		mg/L	100	11/17/2014 6:49:42 PM	R22603
Nitrate+Nitrite as N	ND	2.0		mg/L	10	11/26/2014 11:06:24 AM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.094	0.0020		mg/L	1	11/24/2014 6:34:24 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:34:24 PM	R22755
Calcium	160	5.0		mg/L	5	11/24/2014 6:36:23 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:34:24 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:34:24 PM	R22755
Iron	0.55	0.020	*	mg/L	1	11/24/2014 6:34:24 PM	R22755
Magnesium	26	1.0		mg/L	1	11/24/2014 6:34:24 PM	R22755
Manganese	0.28	0.0020	*	mg/L	1	11/24/2014 6:34:24 PM	R22755
Potassium	12	1.0		mg/L	1	11/24/2014 6:34:24 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:34:24 PM	R22755
Sodium	1800	50		mg/L	50	11/25/2014 2:24:03 PM	R22813
Zinc	0.030	0.010		mg/L	1	11/24/2014 6:34:24 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	11/20/2014 6:31:35 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:31:35 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:31:35 PM	16487
Copper	ND	0.0060		mg/L	1	11/20/2014 6:31:35 PM	16487
Iron	3.4	0.20	*	mg/L	10	11/21/2014 5:35:24 PM	16487
Manganese	0.50	0.0020	*	mg/L	1	11/20/2014 6:31:35 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:31:35 PM	16487
Zinc	0.024	0.010		mg/L	1	11/20/2014 6:31:35 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	12/1/2014 4:01:51 PM	R22871

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Q4 2014
Collection Date: 11/14/2014 12:21:00 PM
Lab ID: 1411590-007
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.010		mg/L	10	12/1/2014 4:01:51 PM	R22871
Selenium	ND	0.010		mg/L	10	12/1/2014 4:01:51 PM	R22871
Uranium	0.075	0.010	*	mg/L	10	12/1/2014 5:38:03 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	11/26/2014 6:24:21 PM	16487
Lead	ND	0.0050		mg/L	5	11/26/2014 6:24:21 PM	16487
Selenium	ND	0.010		mg/L	10	12/3/2014 3:18:51 PM	16487
Uranium	0.087	0.010	*	mg/L	10	12/3/2014 3:18:51 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 2:59:07 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 8:32:51 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Q4 2014
Collection Date: 11/14/2014 12:21:00 PM
Lab ID: 1411590-007
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 8:32:51 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 8:32:51 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 8:32:51 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 8:32:51 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Q4 2014
Collection Date: 11/14/2014 12:21:00 PM
Lab ID: 1411590-007
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 8:32:51 PM	16427
Surr: 2-Fluorophenol	72.2	17.6-104		%REC	1	11/19/2014 8:32:51 PM	16427
Surr: Phenol-d5	64.9	17.7-89.9		%REC	1	11/19/2014 8:32:51 PM	16427
Surr: 2,4,6-Tribromophenol	92.0	16.3-122		%REC	1	11/19/2014 8:32:51 PM	16427
Surr: Nitrobenzene-d5	92.3	45.3-117		%REC	1	11/19/2014 8:32:51 PM	16427
Surr: 2-Fluorobiphenyl	85.7	43-113		%REC	1	11/19/2014 8:32:51 PM	16427
Surr: 4-Terphenyl-d14	89.2	47.6-122		%REC	1	11/19/2014 8:32:51 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Toluene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Ethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Methyl tert-butyl ether (MTBE)	19	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Naphthalene	ND	2.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Acetone	ND	10		µg/L	1	11/18/2014 2:14:46 AM	R22601
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Bromoform	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Bromomethane	ND	3.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
2-Butanone	ND	10		µg/L	1	11/18/2014 2:14:46 AM	R22601
Carbon disulfide	ND	10		µg/L	1	11/18/2014 2:14:46 AM	R22601
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Chloroethane	ND	2.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Chloroform	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Chloromethane	ND	3.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Q4 2014
Collection Date: 11/14/2014 12:21:00 PM
Lab ID: 1411590-007
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1-Dichloroethane	2.8	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
2-Hexanone	ND	10		µg/L	1	11/18/2014 2:14:46 AM	R22601
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 2:14:46 AM	R22601
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Styrene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Vinyl chloride	ND	1.0		µg/L	1	11/18/2014 2:14:46 AM	R22601
Xylenes, Total	ND	1.5		µg/L	1	11/18/2014 2:14:46 AM	R22601
Surr: 1,2-Dichloroethane-d4	111	70-130		%REC	1	11/18/2014 2:14:46 AM	R22601

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: Q4 2014
Collection Date: 11/14/2014 12:21:00 PM
Lab ID: 1411590-007
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	134	70-130	S	%REC	1	11/18/2014 2:14:46 AM	R22601
Surr: Dibromofluoromethane	114	70-130		%REC	1	11/18/2014 2:14:46 AM	R22601
Surr: Toluene-d8	99.0	70-130		%REC	1	11/18/2014 2:14:46 AM	R22601

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: Q4 2014
Collection Date: 11/14/2014 1:55:00 PM
Lab ID: 1411590-008
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/17/2014 7:05:52 PM	16411
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/17/2014 7:05:52 PM	16411
Surr: DNOP	131	59-141		%REC	1	11/17/2014 7:05:52 PM	16411
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/18/2014 1:23:55 AM	R22597
Surr: BFB	88.1	80-120		%REC	1	11/18/2014 1:23:55 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 7:02:07 PM	R22603
Chloride	540	50		mg/L	100	11/17/2014 7:14:32 PM	R22603
Bromide	2.7	1.0		mg/L	10	11/17/2014 7:02:07 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 7:02:07 PM	R22603
Sulfate	260	5.0		mg/L	10	11/17/2014 7:02:07 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 11:18:48 AM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.099	0.0020		mg/L	1	11/24/2014 6:38:23 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:38:23 PM	R22755
Calcium	50	1.0		mg/L	1	11/24/2014 6:38:23 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:38:23 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:38:23 PM	R22755
Iron	0.63	0.020	*	mg/L	1	11/24/2014 6:38:23 PM	R22755
Magnesium	9.2	1.0		mg/L	1	11/24/2014 6:38:23 PM	R22755
Manganese	0.32	0.0020	*	mg/L	1	11/24/2014 6:38:23 PM	R22755
Potassium	3.2	1.0		mg/L	1	11/24/2014 6:38:23 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:38:23 PM	R22755
Sodium	640	10		mg/L	10	11/25/2014 2:31:54 PM	R22813
Zinc	0.038	0.010		mg/L	1	11/24/2014 6:38:23 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.12	0.0020		mg/L	1	11/20/2014 6:33:24 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:33:24 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:33:24 PM	16487
Copper	ND	0.0060		mg/L	1	11/20/2014 6:33:24 PM	16487
Iron	2.0	0.10	*	mg/L	5	11/21/2014 5:37:22 PM	16487
Manganese	0.38	0.0020	*	mg/L	1	11/20/2014 6:33:24 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:33:24 PM	16487
Zinc	0.015	0.010		mg/L	1	11/20/2014 6:33:24 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/2/2014 5:47:35 PM	R22885

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: Q4 2014
Collection Date: 11/14/2014 1:55:00 PM
Lab ID: 1411590-008
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0050		mg/L	5	12/2/2014 5:47:35 PM	R22885
Selenium	ND	0.020		mg/L	20	12/4/2014 11:58:45 AM	R22933
Uranium	0.12	0.0050	*	mg/L	5	12/2/2014 5:47:35 PM	R22885
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0054	0.0050		mg/L	5	11/26/2014 6:27:51 PM	16487
Lead	ND	0.0050		mg/L	5	11/26/2014 6:27:51 PM	16487
Selenium	ND	0.050		mg/L	5	11/26/2014 6:27:51 PM	16487
Uranium	0.11	0.010	*	mg/L	10	12/3/2014 3:28:07 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 3:01:00 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 9:00:24 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

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Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 9:00:24 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 9:00:24 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 9:00:24 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 9:00:24 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427

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Hall Environmental Analysis Laboratory, Inc.

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Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 9:00:24 PM	16427
Surr: 2-Fluorophenol	70.2	17.6-104		%REC	1	11/19/2014 9:00:24 PM	16427
Surr: Phenol-d5	60.2	17.7-89.9		%REC	1	11/19/2014 9:00:24 PM	16427
Surr: 2,4,6-Tribromophenol	99.7	16.3-122		%REC	1	11/19/2014 9:00:24 PM	16427
Surr: Nitrobenzene-d5	91.8	45.3-117		%REC	1	11/19/2014 9:00:24 PM	16427
Surr: 2-Fluorobiphenyl	90.4	43-113		%REC	1	11/19/2014 9:00:24 PM	16427
Surr: 4-Terphenyl-d14	93.9	47.6-122		%REC	1	11/19/2014 9:00:24 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Toluene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Ethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Methyl tert-butyl ether (MTBE)	13	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Naphthalene	ND	2.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Acetone	ND	10		µg/L	1	11/18/2014 2:41:33 AM	R22601
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Bromoform	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Bromomethane	ND	3.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
2-Butanone	ND	10		µg/L	1	11/18/2014 2:41:33 AM	R22601
Carbon disulfide	ND	10		µg/L	1	11/18/2014 2:41:33 AM	R22601
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Chloroethane	ND	2.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Chloroform	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Chloromethane	ND	3.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601

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Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
2-Hexanone	ND	10		µg/L	1	11/18/2014 2:41:33 AM	R22601
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 2:41:33 AM	R22601
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Styrene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Vinyl chloride	ND	1.0		µg/L	1	11/18/2014 2:41:33 AM	R22601
Xylenes, Total	ND	1.5		µg/L	1	11/18/2014 2:41:33 AM	R22601
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	11/18/2014 2:41:33 AM	R22601

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CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: Q4 2014
Collection Date: 11/14/2014 1:55:00 PM
Lab ID: 1411590-008
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	139	70-130	S	%REC	1	11/18/2014 2:41:33 AM	R22601
Surr: Dibromofluoromethane	101	70-130		%REC	1	11/18/2014 2:41:33 AM	R22601
Surr: Toluene-d8	104	70-130		%REC	1	11/18/2014 2:41:33 AM	R22601

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Q4 2014
Collection Date: 11/14/2014 3:40:00 PM
Lab ID: 1411590-009
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/17/2014 7:26:50 PM	16411
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/17/2014 7:26:50 PM	16411
Surr: DNOP	140	59-141		%REC	1	11/17/2014 7:26:50 PM	16411
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	5.7	0.50		mg/L	10	11/18/2014 1:51:30 AM	R22597
Surr: BFB	97.8	80-120		%REC	10	11/18/2014 1:51:30 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 7:26:56 PM	R22603
Chloride	630	50		mg/L	100	11/17/2014 7:39:21 PM	R22603
Bromide	1.4	1.0		mg/L	10	11/17/2014 7:26:56 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 7:26:56 PM	R22603
Sulfate	72	5.0		mg/L	10	11/17/2014 7:26:56 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 12:08:26 PM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.29	0.0020		mg/L	1	11/24/2014 6:42:12 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:42:12 PM	R22755
Calcium	120	5.0		mg/L	5	11/24/2014 6:43:47 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:42:12 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:42:12 PM	R22755
Iron	4.4	0.10	*	mg/L	5	11/24/2014 6:43:47 PM	R22755
Magnesium	22	1.0		mg/L	1	11/24/2014 6:42:12 PM	R22755
Manganese	1.6	0.010	*	mg/L	5	11/24/2014 6:43:47 PM	R22755
Potassium	5.4	1.0		mg/L	1	11/24/2014 6:42:12 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:42:12 PM	R22755
Sodium	550	10		mg/L	10	11/25/2014 2:33:50 PM	R22813
Zinc	0.018	0.010		mg/L	1	11/24/2014 6:42:12 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.48	0.0020		mg/L	1	11/20/2014 6:35:07 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:35:07 PM	16487
Chromium	0.0098	0.0060		mg/L	1	11/20/2014 6:35:07 PM	16487
Copper	0.015	0.0060		mg/L	1	11/20/2014 6:35:07 PM	16487
Iron	6.9	0.20	*	mg/L	10	11/21/2014 5:48:14 PM	16487
Manganese	1.9	0.020	*	mg/L	10	11/21/2014 5:48:14 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:35:07 PM	16487
Zinc	0.026	0.010		mg/L	1	11/20/2014 6:35:07 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/2/2014 5:50:34 PM	R22885

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Q4 2014
Collection Date: 11/14/2014 3:40:00 PM
Lab ID: 1411590-009
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0050		mg/L	5	12/2/2014 5:50:34 PM	R22885
Selenium	ND	0.0050		mg/L	5	12/2/2014 5:50:34 PM	R22885
Uranium	0.038	0.0050	*	mg/L	5	12/2/2014 5:50:34 PM	R22885
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	11/26/2014 6:41:53 PM	16487
Lead	0.012	0.0050		mg/L	5	11/26/2014 6:41:53 PM	16487
Selenium	ND	0.010		mg/L	10	12/3/2014 3:31:12 PM	16487
Uranium	0.038	0.010	*	mg/L	10	12/3/2014 3:31:12 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 3:06:32 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 9:27:49 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Bis(2-ethylhexyl)phthalate	11	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Q4 2014
Collection Date: 11/14/2014 3:40:00 PM
Lab ID: 1411590-009
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 9:27:49 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 9:27:49 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 9:27:49 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 9:27:49 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427

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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.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Q4 2014
Collection Date: 11/14/2014 3:40:00 PM
Lab ID: 1411590-009
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 9:27:49 PM	16427
Surr: 2-Fluorophenol	67.8	17.6-104		%REC	1	11/19/2014 9:27:49 PM	16427
Surr: Phenol-d5	60.9	17.7-89.9		%REC	1	11/19/2014 9:27:49 PM	16427
Surr: 2,4,6-Tribromophenol	87.6	16.3-122		%REC	1	11/19/2014 9:27:49 PM	16427
Surr: Nitrobenzene-d5	84.2	45.3-117		%REC	1	11/19/2014 9:27:49 PM	16427
Surr: 2-Fluorobiphenyl	79.9	43-113		%REC	1	11/19/2014 9:27:49 PM	16427
Surr: 4-Terphenyl-d14	85.2	47.6-122		%REC	1	11/19/2014 9:27:49 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	1600	50		µg/L	50	11/21/2014 2:11:57 PM	R22714
Toluene	9.5	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Ethylbenzene	49	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Methyl tert-butyl ether (MTBE)	63	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2,4-Trimethylbenzene	2.7	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2-Dichloroethane (EDC)	9.6	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Naphthalene	ND	2.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1-Methylnaphthalene	4.6	4.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Acetone	ND	10		µg/L	1	11/18/2014 3:34:59 AM	R22601
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Bromoform	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Bromomethane	ND	3.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
2-Butanone	ND	10		µg/L	1	11/18/2014 3:34:59 AM	R22601
Carbon disulfide	ND	10		µg/L	1	11/18/2014 3:34:59 AM	R22601
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Chloroethane	ND	2.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Chloroform	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Chloromethane	ND	3.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
cis-1,2-DCE	39	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Q4 2014
Collection Date: 11/14/2014 3:40:00 PM
Lab ID: 1411590-009
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,1-Dichloroethane	150	10		µg/L	10	11/18/2014 3:08:13 AM	R22601
1,1-Dichloroethene	58	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
2-Hexanone	ND	10		µg/L	1	11/18/2014 3:34:59 AM	R22601
Isopropylbenzene	18	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 3:34:59 AM	R22601
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
n-Butylbenzene	5.8	3.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
n-Propylbenzene	28	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
sec-Butylbenzene	4.0	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Styrene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,1,1-Trichloroethane	4.6	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,1,2-Trichloroethane	1.1	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Trichloroethene (TCE)	4.9	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Vinyl chloride	14	1.0		µg/L	1	11/18/2014 3:34:59 AM	R22601
Xylenes, Total	2.9	1.5		µg/L	1	11/18/2014 3:34:59 AM	R22601
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	11/18/2014 3:34:59 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: Q4 2014
Collection Date: 11/14/2014 3:40:00 PM
Lab ID: 1411590-009
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	1	11/18/2014 3:34:59 AM	R22601
Surr: Dibromofluoromethane	100	70-130		%REC	1	11/18/2014 3:34:59 AM	R22601
Surr: Toluene-d8	96.9	70-130		%REC	1	11/18/2014 3:34:59 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Q4 2014
Collection Date: 11/14/2014 3:33:00 PM
Lab ID: 1411590-010
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/19/2014 12:42:06 AM	16415
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 12:42:06 AM	16415
Surr: DNOP	99.4	59-141		%REC	1	11/19/2014 12:42:06 AM	16415
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	4.8	0.50		mg/L	10	11/18/2014 2:18:38 AM	R22597
Surr: BFB	111	80-120		%REC	10	11/18/2014 2:18:38 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 7:51:46 PM	R22603
Chloride	880	50		mg/L	100	11/17/2014 8:04:10 PM	R22603
Bromide	1.4	1.0		mg/L	10	11/17/2014 7:51:46 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 7:51:46 PM	R22603
Sulfate	35	5.0		mg/L	10	11/17/2014 7:51:46 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 12:20:50 PM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.28	0.0020		mg/L	1	11/24/2014 6:45:42 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:45:42 PM	R22755
Calcium	150	5.0		mg/L	5	11/24/2014 6:47:36 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:45:42 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:45:42 PM	R22755
Iron	0.21	0.020		mg/L	1	11/24/2014 6:45:42 PM	R22755
Magnesium	27	1.0		mg/L	1	11/24/2014 6:45:42 PM	R22755
Manganese	3.1	0.010	*	mg/L	5	11/24/2014 6:47:36 PM	R22755
Potassium	1.2	1.0		mg/L	1	11/24/2014 6:45:42 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:45:42 PM	R22755
Sodium	640	10		mg/L	10	11/25/2014 2:35:46 PM	R22813
Zinc	0.10	0.010		mg/L	1	11/24/2014 6:45:42 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.37	0.0020		mg/L	1	11/20/2014 6:36:48 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:36:48 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:36:48 PM	16487
Copper	0.011	0.0060		mg/L	1	11/20/2014 6:36:48 PM	16487
Iron	2.7	0.20	*	mg/L	10	11/21/2014 5:50:11 PM	16487
Manganese	3.6	0.020	*	mg/L	10	11/21/2014 5:50:11 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:36:48 PM	16487
Zinc	0.013	0.010		mg/L	1	11/20/2014 6:36:48 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	12/2/2014 5:53:33 PM	R22885

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Q4 2014
Collection Date: 11/14/2014 3:33:00 PM
Lab ID: 1411590-010
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0050		mg/L	5	12/2/2014 5:53:33 PM	R22885
Selenium	ND	0.0050		mg/L	5	12/2/2014 5:53:33 PM	R22885
Uranium	0.030	0.0050	*	mg/L	5	12/2/2014 5:53:33 PM	R22885
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	11/26/2014 6:45:22 PM	16487
Lead	0.0074	0.0050		mg/L	5	11/26/2014 6:45:22 PM	16487
Selenium	ND	0.010		mg/L	10	12/3/2014 3:34:17 PM	16487
Uranium	0.030	0.010	*	mg/L	10	12/3/2014 3:34:17 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 3:08:22 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 9:55:09 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Q4 2014
Collection Date: 11/14/2014 3:33:00 PM
Lab ID: 1411590-010
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 9:55:09 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 9:55:09 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 9:55:09 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 9:55:09 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Q4 2014
Collection Date: 11/14/2014 3:33:00 PM
Lab ID: 1411590-010
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Pyrene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 9:55:09 PM	16427
Surr: 2-Fluorophenol	46.2	17.6-104		%REC	1	11/19/2014 9:55:09 PM	16427
Surr: Phenol-d5	44.2	17.7-89.9		%REC	1	11/19/2014 9:55:09 PM	16427
Surr: 2,4,6-Tribromophenol	75.8	16.3-122		%REC	1	11/19/2014 9:55:09 PM	16427
Surr: Nitrobenzene-d5	61.7	45.3-117		%REC	1	11/19/2014 9:55:09 PM	16427
Surr: 2-Fluorobiphenyl	58.3	43-113		%REC	1	11/19/2014 9:55:09 PM	16427
Surr: 4-Terphenyl-d14	79.3	47.6-122		%REC	1	11/19/2014 9:55:09 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	580	50		µg/L	50	11/18/2014 1:09:49 PM	R22619
Toluene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Ethylbenzene	23	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Methyl tert-butyl ether (MTBE)	180	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2-Dichloroethane (EDC)	12	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Naphthalene	ND	10		µg/L	5	11/18/2014 4:28:29 AM	R22601
1-Methylnaphthalene	ND	20		µg/L	5	11/18/2014 4:28:29 AM	R22601
2-Methylnaphthalene	ND	20		µg/L	5	11/18/2014 4:28:29 AM	R22601
Acetone	ND	50		µg/L	5	11/18/2014 4:28:29 AM	R22601
Bromobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Bromodichloromethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Bromoform	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Bromomethane	ND	15		µg/L	5	11/18/2014 4:28:29 AM	R22601
2-Butanone	ND	50		µg/L	5	11/18/2014 4:28:29 AM	R22601
Carbon disulfide	ND	50		µg/L	5	11/18/2014 4:28:29 AM	R22601
Carbon Tetrachloride	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Chlorobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Chloroethane	ND	10		µg/L	5	11/18/2014 4:28:29 AM	R22601
Chloroform	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Chloromethane	ND	15		µg/L	5	11/18/2014 4:28:29 AM	R22601
2-Chlorotoluene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
4-Chlorotoluene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
cis-1,2-DCE	44	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Q4 2014
Collection Date: 11/14/2014 3:33:00 PM
Lab ID: 1411590-010
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	11/18/2014 4:28:29 AM	R22601
Dibromochloromethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Dibromomethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2-Dichlorobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,3-Dichlorobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,4-Dichlorobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Dichlorodifluoromethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1-Dichloroethane	230	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1-Dichloroethene	98	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2-Dichloropropane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,3-Dichloropropane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
2,2-Dichloropropane	ND	10		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1-Dichloropropene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Hexachlorobutadiene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
2-Hexanone	ND	50		µg/L	5	11/18/2014 4:28:29 AM	R22601
Isopropylbenzene	40	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
4-Isopropyltoluene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
4-Methyl-2-pentanone	ND	50		µg/L	5	11/18/2014 4:28:29 AM	R22601
Methylene Chloride	ND	15		µg/L	5	11/18/2014 4:28:29 AM	R22601
n-Butylbenzene	ND	15		µg/L	5	11/18/2014 4:28:29 AM	R22601
n-Propylbenzene	37	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
sec-Butylbenzene	6.6	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Styrene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
tert-Butylbenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	11/18/2014 4:28:29 AM	R22601
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
trans-1,2-DCE	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1,1-Trichloroethane	23	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,1,2-Trichloroethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Trichloroethene (TCE)	27	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Trichlorofluoromethane	ND	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
1,2,3-Trichloropropane	ND	10		µg/L	5	11/18/2014 4:28:29 AM	R22601
Vinyl chloride	46	5.0		µg/L	5	11/18/2014 4:28:29 AM	R22601
Xylenes, Total	ND	7.5		µg/L	5	11/18/2014 4:28:29 AM	R22601
Surr: 1,2-Dichloroethane-d4	108	70-130		%REC	5	11/18/2014 4:28:29 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: Q4 2014
Collection Date: 11/14/2014 3:33:00 PM
Lab ID: 1411590-010
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	103	70-130		%REC	5	11/18/2014 4:28:29 AM	R22601
Surr: Dibromofluoromethane	97.3	70-130		%REC	5	11/18/2014 4:28:29 AM	R22601
Surr: Toluene-d8	96.7	70-130		%REC	5	11/18/2014 4:28:29 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TB-501
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-011
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/18/2014 2:45:45 AM	R22597
Surr: BFB	88.0	80-120		%REC	1	11/18/2014 2:45:45 AM	R22597
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Toluene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Ethylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Naphthalene	ND	2.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Acetone	ND	10		µg/L	1	11/18/2014 4:55:14 AM	R22601
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Bromoform	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Bromomethane	ND	3.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
2-Butanone	ND	10		µg/L	1	11/18/2014 4:55:14 AM	R22601
Carbon disulfide	ND	10		µg/L	1	11/18/2014 4:55:14 AM	R22601
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Chloroethane	ND	2.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Chloroform	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Chloromethane	ND	3.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TB-501
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-011
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
2-Hexanone	ND	10		µg/L	1	11/18/2014 4:55:14 AM	R22601
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 4:55:14 AM	R22601
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Styrene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Vinyl chloride	ND	1.0		µg/L	1	11/18/2014 4:55:14 AM	R22601
Xylenes, Total	ND	1.5		µg/L	1	11/18/2014 4:55:14 AM	R22601
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	11/18/2014 4:55:14 AM	R22601
Surr: 4-Bromofluorobenzene	138	70-130	S	%REC	1	11/18/2014 4:55:14 AM	R22601
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	11/18/2014 4:55:14 AM	R22601
Surr: Toluene-d8	102	70-130		%REC	1	11/18/2014 4:55:14 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Q4 2014
Collection Date: 11/13/2014 3:45:00 PM
Lab ID: 1411590-012
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	2.0	1.0		mg/L	1	11/19/2014 1:41:00 AM	16415
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 1:41:00 AM	16415
Surr: DNOP	102	59-141		%REC	1	11/19/2014 1:41:00 AM	16415
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	4.2	0.50		mg/L	10	11/18/2014 3:12:52 AM	R22597
Surr: BFB	93.6	80-120		%REC	10	11/18/2014 3:12:52 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	ND	1.0		mg/L	10	11/17/2014 8:16:35 PM	R22603
Chloride	250	50		mg/L	100	11/17/2014 8:29:00 PM	R22603
Bromide	2.1	1.0		mg/L	10	11/17/2014 8:16:35 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 8:16:35 PM	R22603
Sulfate	26	5.0		mg/L	10	11/17/2014 8:16:35 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 12:33:14 PM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.3	0.010		mg/L	5	11/24/2014 6:51:14 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 6:49:35 PM	R22755
Calcium	110	5.0		mg/L	5	11/24/2014 6:51:14 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 6:49:35 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 6:49:35 PM	R22755
Iron	4.7	0.10	*	mg/L	5	11/24/2014 6:51:14 PM	R22755
Magnesium	27	1.0		mg/L	1	11/24/2014 6:49:35 PM	R22755
Manganese	1.8	0.010	*	mg/L	5	11/24/2014 6:51:14 PM	R22755
Potassium	1.4	1.0		mg/L	1	11/24/2014 6:49:35 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 6:49:35 PM	R22755
Sodium	370	5.0		mg/L	5	11/24/2014 6:51:14 PM	R22755
Zinc	0.010	0.010		mg/L	1	11/24/2014 6:49:35 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.9	0.010		mg/L	5	11/21/2014 5:52:07 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:38:35 PM	16487
Chromium	0.0086	0.0060		mg/L	1	11/20/2014 6:38:35 PM	16487
Copper	0.015	0.0060		mg/L	1	11/20/2014 6:38:35 PM	16487
Iron	15	1.0	*	mg/L	50	11/21/2014 5:53:51 PM	16487
Manganese	2.5	0.010	*	mg/L	5	11/21/2014 5:52:07 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:38:35 PM	16487
Zinc	0.030	0.010		mg/L	1	11/20/2014 6:38:35 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0060	0.0050		mg/L	5	12/2/2014 5:56:32 PM	R22885

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Q4 2014
Collection Date: 11/13/2014 3:45:00 PM
Lab ID: 1411590-012
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0050		mg/L	5	12/2/2014 5:56:32 PM	R22885
Selenium	ND	0.0050		mg/L	5	12/2/2014 5:56:32 PM	R22885
Uranium	0.013	0.0050		mg/L	5	12/2/2014 5:56:32 PM	R22885
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0079	0.0050		mg/L	5	11/26/2014 6:48:51 PM	16487
Lead	0.023	0.0050	*	mg/L	5	11/26/2014 6:48:51 PM	16487
Selenium	ND	0.050		mg/L	5	11/26/2014 6:48:51 PM	16487
Uranium	0.013	0.010		mg/L	10	12/3/2014 3:37:22 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 3:10:12 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 10:22:27 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Carbazole	17	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Q4 2014
Collection Date: 11/13/2014 3:45:00 PM
Lab ID: 1411590-012
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 10:22:27 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 10:22:27 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 10:22:27 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
1-Methylnaphthalene	61	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2-Methylnaphthalene	47	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Naphthalene	80	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 10:22:27 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Q4 2014
Collection Date: 11/13/2014 3:45:00 PM
Lab ID: 1411590-012
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Pyrene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 10:22:27 PM	16427
Surr: 2-Fluorophenol	73.3	17.6-104		%REC	1	11/19/2014 10:22:27 PM	16427
Surr: Phenol-d5	67.3	17.7-89.9		%REC	1	11/19/2014 10:22:27 PM	16427
Surr: 2,4,6-Tribromophenol	94.2	16.3-122		%REC	1	11/19/2014 10:22:27 PM	16427
Surr: Nitrobenzene-d5	82.5	45.3-117		%REC	1	11/19/2014 10:22:27 PM	16427
Surr: 2-Fluorobiphenyl	84.7	43-113		%REC	1	11/19/2014 10:22:27 PM	16427
Surr: 4-Terphenyl-d14	86.7	47.6-122		%REC	1	11/19/2014 10:22:27 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	180	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Toluene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Ethylbenzene	280	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Methyl tert-butyl ether (MTBE)	1400	50		µg/L	50	11/18/2014 1:36:32 PM	R22619
1,2,4-Trimethylbenzene	200	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,3,5-Trimethylbenzene	19	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Naphthalene	130	20		µg/L	10	11/18/2014 5:22:00 AM	R22601
1-Methylnaphthalene	95	40		µg/L	10	11/18/2014 5:22:00 AM	R22601
2-Methylnaphthalene	80	40		µg/L	10	11/18/2014 5:22:00 AM	R22601
Acetone	ND	100		µg/L	10	11/18/2014 5:22:00 AM	R22601
Bromobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Bromodichloromethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Bromoform	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Bromomethane	ND	30		µg/L	10	11/18/2014 5:22:00 AM	R22601
2-Butanone	ND	100		µg/L	10	11/18/2014 5:22:00 AM	R22601
Carbon disulfide	ND	100		µg/L	10	11/18/2014 5:22:00 AM	R22601
Carbon Tetrachloride	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Chlorobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Chloroethane	ND	20		µg/L	10	11/18/2014 5:22:00 AM	R22601
Chloroform	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Chloromethane	ND	30		µg/L	10	11/18/2014 5:22:00 AM	R22601
2-Chlorotoluene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
4-Chlorotoluene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
cis-1,2-DCE	14	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Q4 2014
Collection Date: 11/13/2014 3:45:00 PM
Lab ID: 1411590-012
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/18/2014 5:22:00 AM	R22601
Dibromochloromethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Dibromomethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2-Dichlorobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,3-Dichlorobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,4-Dichlorobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Dichlorodifluoromethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1-Dichloroethane	37	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1-Dichloroethene	59	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2-Dichloropropane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,3-Dichloropropane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
2,2-Dichloropropane	ND	20		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1-Dichloropropene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Hexachlorobutadiene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
2-Hexanone	ND	100		µg/L	10	11/18/2014 5:22:00 AM	R22601
Isopropylbenzene	16	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
4-Isopropyltoluene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
4-Methyl-2-pentanone	ND	100		µg/L	10	11/18/2014 5:22:00 AM	R22601
Methylene Chloride	ND	30		µg/L	10	11/18/2014 5:22:00 AM	R22601
n-Butylbenzene	ND	30		µg/L	10	11/18/2014 5:22:00 AM	R22601
n-Propylbenzene	29	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
sec-Butylbenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Styrene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
tert-Butylbenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/18/2014 5:22:00 AM	R22601
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
trans-1,2-DCE	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1,1-Trichloroethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,1,2-Trichloroethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Trichloroethene (TCE)	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Trichlorofluoromethane	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
1,2,3-Trichloropropane	ND	20		µg/L	10	11/18/2014 5:22:00 AM	R22601
Vinyl chloride	ND	10		µg/L	10	11/18/2014 5:22:00 AM	R22601
Xylenes, Total	260	15		µg/L	10	11/18/2014 5:22:00 AM	R22601
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%REC	10	11/18/2014 5:22:00 AM	R22601

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-04
Project: Q4 2014
Collection Date: 11/13/2014 3:45:00 PM
Lab ID: 1411590-012
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	91.4	70-130		%REC	10	11/18/2014 5:22:00 AM	R22601
Surr: Dibromofluoromethane	93.9	70-130		%REC	10	11/18/2014 5:22:00 AM	R22601
Surr: Toluene-d8	103	70-130		%REC	10	11/18/2014 5:22:00 AM	R22601

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Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Q4 2014
Collection Date: 11/13/2014 4:42:00 PM
Lab ID: 1411590-013
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	1.8	1.0		mg/L	1	11/19/2014 2:10:46 AM	16415
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/19/2014 2:10:46 AM	16415
Surr: DNOP	109	59-141		%REC	1	11/19/2014 2:10:46 AM	16415
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	35	2.5		mg/L	50	11/18/2014 3:40:00 AM	R22597
Surr: BFB	90.9	80-120		%REC	50	11/18/2014 3:40:00 AM	R22597
EPA METHOD 300.0: ANIONS						Analyst:	**LGP**
Fluoride	6.5	1.0	*	mg/L	10	11/17/2014 9:06:15 PM	R22603
Chloride	780	50		mg/L	100	11/17/2014 9:18:40 PM	R22603
Bromide	ND	1.0		mg/L	10	11/17/2014 9:06:15 PM	R22603
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/17/2014 9:06:15 PM	R22603
Sulfate	ND	5.0		mg/L	10	11/17/2014 9:06:15 PM	R22603
Nitrate+Nitrite as N	ND	1.0		mg/L	5	11/26/2014 12:45:39 PM	R22848
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.5	0.010		mg/L	5	11/24/2014 7:02:56 PM	R22755
Cadmium	ND	0.0020		mg/L	1	11/24/2014 7:01:06 PM	R22755
Calcium	120	5.0		mg/L	5	11/24/2014 7:02:56 PM	R22755
Chromium	ND	0.0060		mg/L	1	11/24/2014 7:01:06 PM	R22755
Copper	ND	0.0060		mg/L	1	11/24/2014 7:01:06 PM	R22755
Iron	3.4	0.10	*	mg/L	5	11/24/2014 7:02:56 PM	R22755
Magnesium	34	1.0		mg/L	1	11/24/2014 7:01:06 PM	R22755
Manganese	3.2	0.010	*	mg/L	5	11/24/2014 7:02:56 PM	R22755
Potassium	1.3	1.0		mg/L	1	11/24/2014 7:01:06 PM	R22755
Silver	ND	0.0050		mg/L	1	11/24/2014 7:01:06 PM	R22755
Sodium	660	10		mg/L	10	11/25/2014 2:37:39 PM	R22813
Zinc	0.019	0.010		mg/L	1	11/24/2014 7:01:06 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.7	0.020		mg/L	10	11/21/2014 5:55:52 PM	16487
Cadmium	ND	0.0020		mg/L	1	11/20/2014 6:47:22 PM	16487
Chromium	ND	0.0060		mg/L	1	11/20/2014 6:47:22 PM	16487
Copper	ND	0.0060		mg/L	1	11/20/2014 6:47:22 PM	16487
Iron	5.8	0.20	*	mg/L	10	11/21/2014 5:55:52 PM	16487
Manganese	3.4	0.020	*	mg/L	10	11/21/2014 5:55:52 PM	16487
Silver	ND	0.0050		mg/L	1	11/20/2014 6:47:22 PM	16487
Zinc	0.012	0.010		mg/L	1	11/20/2014 6:47:22 PM	16487
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	1	12/4/2014 11:43:48 AM	R22933

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Q4 2014
Collection Date: 11/13/2014 4:42:00 PM
Lab ID: 1411590-013
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	12/4/2014 11:43:48 AM	R22933
Selenium	0.0051	0.0010		mg/L	1	12/4/2014 11:43:48 AM	R22933
Uranium	0.0033	0.0010		mg/L	1	12/4/2014 11:43:48 AM	R22933
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0087	0.0050		mg/L	5	11/26/2014 3:14:31 PM	16487
Lead	ND	0.0050		mg/L	5	11/26/2014 3:14:31 PM	16487
Selenium	ND	0.0050		mg/L	5	11/26/2014 3:14:31 PM	16487
Uranium	ND	0.0050		mg/L	5	11/26/2014 3:14:31 PM	16487
EPA METHOD 245.1: MERCURY						Analyst:	**MMD**
Mercury	ND	0.00020		mg/L	1	11/26/2014 3:12:03 PM	16593
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 10:49:55 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Bis(2-ethylhexyl)phthalate	14	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Q4 2014
Collection Date: 11/13/2014 4:42:00 PM
Lab ID: 1411590-013
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 10:49:55 PM	16427
2,4-Dimethylphenol	12	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 10:49:55 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 10:49:55 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
1-Methylnaphthalene	15	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2-Methylphenol	70	10		µg/L	1	11/19/2014 10:49:55 PM	16427
3+4-Methylphenol	46	10		µg/L	1	11/19/2014 10:49:55 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Naphthalene	31	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 10:49:55 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Phenol	20	10		µg/L	1	11/19/2014 10:49:55 PM	16427

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Q4 2014
Collection Date: 11/13/2014 4:42:00 PM
Lab ID: 1411590-013
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Pyrene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 10:49:55 PM	16427
Surr: 2-Fluorophenol	47.8	17.6-104		%REC	1	11/19/2014 10:49:55 PM	16427
Surr: Phenol-d5	56.2	17.7-89.9		%REC	1	11/19/2014 10:49:55 PM	16427
Surr: 2,4,6-Tribromophenol	70.0	16.3-122		%REC	1	11/19/2014 10:49:55 PM	16427
Surr: Nitrobenzene-d5	77.0	45.3-117		%REC	1	11/19/2014 10:49:55 PM	16427
Surr: 2-Fluorobiphenyl	80.6	43-113		%REC	1	11/19/2014 10:49:55 PM	16427
Surr: 4-Terphenyl-d14	63.1	47.6-122		%REC	1	11/19/2014 10:49:55 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	9500	200		µg/L	200	11/18/2014 5:48:44 AM	R22601
Toluene	8200	200		µg/L	200	11/18/2014 5:48:44 AM	R22601
Ethylbenzene	770	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Methyl tert-butyl ether (MTBE)	80	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2,4-Trimethylbenzene	400	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,3,5-Trimethylbenzene	60	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Naphthalene	58	40		µg/L	20	11/18/2014 6:15:29 AM	R22601
1-Methylnaphthalene	ND	80		µg/L	20	11/18/2014 6:15:29 AM	R22601
2-Methylnaphthalene	ND	80		µg/L	20	11/18/2014 6:15:29 AM	R22601
Acetone	ND	200		µg/L	20	11/18/2014 6:15:29 AM	R22601
Bromobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Bromodichloromethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Bromoform	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Bromomethane	ND	60		µg/L	20	11/18/2014 6:15:29 AM	R22601
2-Butanone	ND	200		µg/L	20	11/18/2014 6:15:29 AM	R22601
Carbon disulfide	ND	200		µg/L	20	11/18/2014 6:15:29 AM	R22601
Carbon Tetrachloride	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Chlorobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Chloroethane	ND	40		µg/L	20	11/18/2014 6:15:29 AM	R22601
Chloroform	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Chloromethane	ND	60		µg/L	20	11/18/2014 6:15:29 AM	R22601
2-Chlorotoluene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
4-Chlorotoluene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
cis-1,2-DCE	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
cis-1,3-Dichloropropene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Q4 2014
Collection Date: 11/13/2014 4:42:00 PM
Lab ID: 1411590-013
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	11/18/2014 6:15:29 AM	R22601
Dibromochloromethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Dibromomethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2-Dichlorobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,3-Dichlorobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,4-Dichlorobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Dichlorodifluoromethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1-Dichloroethane	47	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1-Dichloroethene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2-Dichloropropane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,3-Dichloropropane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
2,2-Dichloropropane	ND	40		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1-Dichloropropene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Hexachlorobutadiene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
2-Hexanone	ND	200		µg/L	20	11/18/2014 6:15:29 AM	R22601
Isopropylbenzene	29	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
4-Isopropyltoluene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
4-Methyl-2-pentanone	ND	200		µg/L	20	11/18/2014 6:15:29 AM	R22601
Methylene Chloride	ND	60		µg/L	20	11/18/2014 6:15:29 AM	R22601
n-Butylbenzene	ND	60		µg/L	20	11/18/2014 6:15:29 AM	R22601
n-Propylbenzene	78	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
sec-Butylbenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Styrene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
tert-Butylbenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	11/18/2014 6:15:29 AM	R22601
Tetrachloroethene (PCE)	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
trans-1,2-DCE	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
trans-1,3-Dichloropropene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2,3-Trichlorobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2,4-Trichlorobenzene	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1,1-Trichloroethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,1,2-Trichloroethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Trichloroethene (TCE)	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Trichlorofluoromethane	ND	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
1,2,3-Trichloropropane	ND	40		µg/L	20	11/18/2014 6:15:29 AM	R22601
Vinyl chloride	54	20		µg/L	20	11/18/2014 6:15:29 AM	R22601
Xylenes, Total	2300	30		µg/L	20	11/18/2014 6:15:29 AM	R22601
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	20	11/18/2014 6:15:29 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: Q4 2014
Collection Date: 11/13/2014 4:42:00 PM
Lab ID: 1411590-013
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	20	11/18/2014 6:15:29 AM	R22601
Surr: Dibromofluoromethane	92.2	70-130		%REC	20	11/18/2014 6:15:29 AM	R22601
Surr: Toluene-d8	102	70-130		%REC	20	11/18/2014 6:15:29 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-111414
Project: Q4 2014
Collection Date: 11/14/2014 3:45:00 PM
Lab ID: 1411590-014
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Toluene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Ethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Naphthalene	ND	2.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Acetone	ND	10		µg/L	1	11/18/2014 2:03:18 PM	R22619
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Bromoform	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Bromomethane	ND	3.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
2-Butanone	ND	10		µg/L	1	11/18/2014 2:03:18 PM	R22619
Carbon disulfide	ND	10		µg/L	1	11/18/2014 2:03:18 PM	R22619
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Chloroethane	ND	2.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Chloroform	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Chloromethane	ND	3.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 2:03:18 PM	R22619

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

Qualifiers:

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-111414
Project: Q4 2014
Collection Date: 11/14/2014 3:45:00 PM
Lab ID: 1411590-014
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
2-Hexanone	ND	10		µg/L	1	11/18/2014 2:03:18 PM	R22619
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 2:03:18 PM	R22619
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Styrene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Vinyl chloride	ND	1.0		µg/L	1	11/18/2014 2:03:18 PM	R22619
Xylenes, Total	ND	1.5		µg/L	1	11/18/2014 2:03:18 PM	R22619
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	11/18/2014 2:03:18 PM	R22619
Surr: 4-Bromofluorobenzene	136	70-130	S	%REC	1	11/18/2014 2:03:18 PM	R22619
Surr: Dibromofluoromethane	98.0	70-130		%REC	1	11/18/2014 2:03:18 PM	R22619
Surr: Toluene-d8	102	70-130		%REC	1	11/18/2014 2:03:18 PM	R22619

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-111414
Project: Q4 2014
Collection Date: 11/14/2014 3:50:00 PM
Lab ID: 1411590-015
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Toluene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Ethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Naphthalene	ND	2.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Acetone	ND	10		µg/L	1	11/18/2014 2:30:02 PM	R22619
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Bromoform	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Bromomethane	ND	3.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
2-Butanone	ND	10		µg/L	1	11/18/2014 2:30:02 PM	R22619
Carbon disulfide	ND	10		µg/L	1	11/18/2014 2:30:02 PM	R22619
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Chloroethane	ND	2.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Chloroform	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Chloromethane	ND	3.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 2:30:02 PM	R22619

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-111414
Project: Q4 2014
Collection Date: 11/14/2014 3:50:00 PM
Lab ID: 1411590-015
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
2-Hexanone	ND	10		µg/L	1	11/18/2014 2:30:02 PM	R22619
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 2:30:02 PM	R22619
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Styrene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Vinyl chloride	ND	1.0		µg/L	1	11/18/2014 2:30:02 PM	R22619
Xylenes, Total	ND	1.5		µg/L	1	11/18/2014 2:30:02 PM	R22619
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%REC	1	11/18/2014 2:30:02 PM	R22619
Surr: 4-Bromofluorobenzene	138	70-130	S	%REC	1	11/18/2014 2:30:02 PM	R22619
Surr: Dibromofluoromethane	89.7	70-130		%REC	1	11/18/2014 2:30:02 PM	R22619
Surr: Toluene-d8	101	70-130		%REC	1	11/18/2014 2:30:02 PM	R22619

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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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TB-502
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-016
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Toluene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Ethylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Naphthalene	ND	2.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
2-Methylnaphthalene	ND	4.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Acetone	ND	10		µg/L	1	11/18/2014 7:35:41 AM	R22601
Bromobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Bromodichloromethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Bromoform	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Bromomethane	ND	3.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
2-Butanone	ND	10		µg/L	1	11/18/2014 7:35:41 AM	R22601
Carbon disulfide	ND	10		µg/L	1	11/18/2014 7:35:41 AM	R22601
Carbon Tetrachloride	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Chlorobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Chloroethane	ND	2.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Chloroform	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Chloromethane	ND	3.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
2-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
4-Chlorotoluene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
cis-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Dibromochloromethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Dibromomethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,1-Dichloroethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,1-Dichloroethene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,3-Dichloropropane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
2,2-Dichloropropane	ND	2.0		µg/L	1	11/18/2014 7:35:41 AM	R22601

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TB-502
Project: Q4 2014
Collection Date: 11/14/2014
Lab ID: 1411590-016
Matrix: AQUEOUS
Received Date: 11/15/2014 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Hexachlorobutadiene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
2-Hexanone	ND	10		µg/L	1	11/18/2014 7:35:41 AM	R22601
Isopropylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
4-Isopropyltoluene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
4-Methyl-2-pentanone	ND	10		µg/L	1	11/18/2014 7:35:41 AM	R22601
Methylene Chloride	ND	3.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
n-Butylbenzene	ND	3.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
n-Propylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
sec-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Styrene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
tert-Butylbenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
trans-1,2-DCE	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Trichlorofluoromethane	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Vinyl chloride	ND	1.0		µg/L	1	11/18/2014 7:35:41 AM	R22601
Xylenes, Total	ND	1.5		µg/L	1	11/18/2014 7:35:41 AM	R22601
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	11/18/2014 7:35:41 AM	R22601
Surr: 4-Bromofluorobenzene	135	70-130	S	%REC	1	11/18/2014 7:35:41 AM	R22601
Surr: Dibromofluoromethane	89.4	70-130		%REC	1	11/18/2014 7:35:41 AM	R22601
Surr: Toluene-d8	101	70-130		%REC	1	11/18/2014 7:35:41 AM	R22601

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22755** RunNo: **22755**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671448** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22755** RunNo: **22755**
Prep Date: Analysis Date: **11/24/2014** SeqNo: **671449** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.6	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.8	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.48	0.0060	0.5000	0	96.1	85	115			
Copper	0.49	0.0060	0.5000	0	97.6	85	115			
Iron	0.49	0.020	0.5000	0	97.8	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.47	0.0020	0.5000	0	93.5	85	115			
Potassium	49	1.0	50.00	0	97.3	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Sodium	50	1.0	50.00	0	99.2	85	115			
Zinc	0.48	0.010	0.5000	0	96.3	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22813** RunNo: **22813**
Prep Date: Analysis Date: **11/25/2014** SeqNo: **673337** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Calcium	ND	1.0								
Iron	ND	0.020								
Manganese	ND	0.0020								

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA Method 200.7: Dissolved Metals**		
Client ID:	**PBW**	Batch ID:	**R22813**	RunNo:	**22813**		
Prep Date:		Analysis Date:	**11/25/2014**	SeqNo:	**673337**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Dissolved Metals**		
Client ID:	**LCSW**	Batch ID:	**R22813**	RunNo:	**22813**		
Prep Date:		Analysis Date:	**11/25/2014**	SeqNo:	**673338**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	100	85	115			
Calcium	51	1.0	50.00	0	103	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.51	0.0020	0.5000	0	101	85	115			
Sodium	51	1.0	50.00	0	101	85	115			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB-16487** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **16487** RunNo: **22687**
Prep Date: **11/20/2014** Analysis Date: **11/20/2014** SeqNo: **669092** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-16487** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **16487** RunNo: **22687**
Prep Date: **11/20/2014** Analysis Date: **11/20/2014** SeqNo: **669093** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.0	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	98.9	85	115			
Iron	0.51	0.020	0.5000	0	101	85	115			
Manganese	0.48	0.0020	0.5000	0	95.7	85	115			
Silver	0.11	0.0050	0.1000	0	108	85	115			
Zinc	0.48	0.010	0.5000	0	96.7	85	115			

Sample ID **1411590-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-09** Batch ID: **16487** RunNo: **22687**
Prep Date: **11/20/2014** Analysis Date: **11/20/2014** SeqNo: **669178** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.88	0.0020	0.5000	0.3881	98.2	70	130			
Cadmium	0.48	0.0020	0.5000	0	95.9	70	130			
Chromium	0.47	0.0060	0.5000	0	94.5	70	130			
Copper	0.52	0.0060	0.5000	0	104	70	130			
Silver	0.11	0.0050	0.1000	0	107	70	130			
Zinc	0.47	0.010	0.5000	0.01261	90.7	70	130			

Sample ID **1411590-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-09** Batch ID: **16487** RunNo: **22687**
Prep Date: **11/20/2014** Analysis Date: **11/20/2014** SeqNo: **669179** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **1411590-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-09** Batch ID: **16487** RunNo: **22687**
Prep Date: **11/20/2014** Analysis Date: **11/20/2014** SeqNo: **669179** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.89	0.0020	0.5000	0.3881	100	70	130	1.16	20	
Cadmium	0.48	0.0020	0.5000	0	95.8	70	130	0.0104	20	
Chromium	0.47	0.0060	0.5000	0	94.0	70	130	0.473	20	
Copper	0.53	0.0060	0.5000	0	105	70	130	0.645	20	
Silver	0.11	0.0050	0.1000	0	108	70	130	0.419	20	
Zinc	0.47	0.010	0.5000	0.01261	90.6	70	130	0.0730	20	

Sample ID **1411590-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-09** Batch ID: **16487** RunNo: **22732**
Prep Date: **11/20/2014** Analysis Date: **11/21/2014** SeqNo: **670616** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.1	0.010	0.5000	2.703	87.5	70	130			

Sample ID **1411590-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-09** Batch ID: **16487** RunNo: **22732**
Prep Date: **11/20/2014** Analysis Date: **11/21/2014** SeqNo: **670617** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.2	0.010	0.5000	2.703	96.1	70	130	1.36	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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22871** RunNo: **22871**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.7	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22871** RunNo: **22871**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675137** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.023	0.0010	0.02500	0	92.9	85	115			
Uranium	0.023	0.0010	0.02500	0	91.5	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22871** RunNo: **22871**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675138** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	90.2	85	115			
Lead	0.023	0.0010	0.02500	0	93.8	85	115			
Selenium	0.022	0.0010	0.02500	0	88.9	85	115			
Uranium	0.023	0.0010	0.02500	0	92.0	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22871** RunNo: **22871**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675139** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22871** RunNo: **22871**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675140** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22871** RunNo: **22871**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675141** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22885** RunNo: **22885**
Prep Date: Analysis Date: **12/2/2014** SeqNo: **675799** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	98.7	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	94.3	85	115			
Uranium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22885** RunNo: **22885**
Prep Date: Analysis Date: **12/2/2014** SeqNo: **675800** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.025	0.0010	0.02500	0	98.4	85	115			
Selenium	0.024	0.0010	0.02500	0	95.6	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22885** RunNo: **22885**
Prep Date: Analysis Date: **12/2/2014** SeqNo: **675801** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22885** RunNo: **22885**
Prep Date: Analysis Date: **12/2/2014** SeqNo: **675802** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22885** RunNo: **22885**
Prep Date: Analysis Date: **12/2/2014** SeqNo: **675802** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677289** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.4	85	115			
Lead	0.024	0.0010	0.02500	0	97.8	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.025	0.0010	0.02500	0	99.9	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677290** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.024	0.0010	0.02500	0	96.7	85	115			
Selenium	0.024	0.0010	0.02500	0	95.5	85	115			
Uranium	0.023	0.0010	0.02500	0	92.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677291** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R22933** RunNo: **22933**
Prep Date: Analysis Date: **12/4/2014** SeqNo: **677292** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**			
Client ID: **PBW**	Batch ID: **R22933**	RunNo: **22933**			
Prep Date:	Analysis Date: **12/4/2014**	SeqNo: **677292**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **LLLCS-16487** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **16487** RunNo: **22842**
Prep Date: **11/20/2014** Analysis Date: **11/26/2014** SeqNo: **674131** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	103	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.025	0.0010	0.02500	0	101	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB-16487** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **16487** RunNo: **22842**
Prep Date: **11/20/2014** Analysis Date: **11/26/2014** SeqNo: **674136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **1411590-008FMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **MKTF-28** Batch ID: **16487** RunNo: **22843**
Prep Date: **11/20/2014** Analysis Date: **11/26/2014** SeqNo: **674373** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.031	0.0050	0.02500	0.005428	102	70	130			
Lead	0.025	0.0050	0.02500	0.002370	92.4	70	130			
Selenium	0.040	0.0050	0.02500	0.01444	102	70	130			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB-16593** SampType: **MBLK** TestCode: **EPA Method 245.1: Mercury**
Client ID: **PBW** Batch ID: **16593** RunNo: **22825**
Prep Date: **11/26/2014** Analysis Date: **11/26/2014** SeqNo: **673696** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-16593** SampType: **LCS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **LCSW** Batch ID: **16593** RunNo: **22825**
Prep Date: **11/26/2014** Analysis Date: **11/26/2014** SeqNo: **673697** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Sample ID **1411590-006FMS** SampType: **MS** TestCode: **EPA Method 245.1: Mercury**
Client ID: **MKTF-26** Batch ID: **16593** RunNo: **22825**
Prep Date: **11/26/2014** Analysis Date: **11/26/2014** SeqNo: **673702** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0039	0.00020	0.005000	0	78.5	75	125			

Sample ID **1411590-006FMSD** SampType: **MSD** TestCode: **EPA Method 245.1: Mercury**
Client ID: **MKTF-26** Batch ID: **16593** RunNo: **22825**
Prep Date: **11/26/2014** Analysis Date: **11/26/2014** SeqNo: **673703** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0038	0.00020	0.005000	0	75.4	75	125	4.12	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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666596** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666597** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.7	90	110			
Chloride	4.8	0.50	5.000	0	95.8	90	110			
Bromide	2.5	0.10	2.500	0	99.7	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.5	90	110			
Sulfate	9.6	0.50	10.00	0	96.1	90	110			

Sample ID **1411590-002EMS** SampType: **MS** TestCode: **EPA Method 300.0: Anions**
Client ID: **MKTF-09** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666609** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.9	1.0	5.000	0.2260	92.8	66.1	113			
Bromide	25	1.0	25.00	1.221	96.1	82.5	103			
Sulfate	240	5.0	100.0	139.3	96.5	88.3	114			

Sample ID **1411590-002EMSD** SampType: **MSD** TestCode: **EPA Method 300.0: Anions**
Client ID: **MKTF-09** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666610** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.9	1.0	5.000	0.2260	93.2	66.1	113	0.390	20	
Bromide	25	1.0	25.00	1.221	97.0	82.5	103	0.927	20	
Sulfate	240	5.0	100.0	139.3	98.6	88.3	114	0.889	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **666650** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **666650** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R22603** RunNo: **22603**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **666651** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.4	90	110			
Chloride	4.9	0.50	5.000	0	97.5	90	110			
Bromide	2.5	0.10	2.500	0	102	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	99.7	90	110			
Sulfate	9.8	0.50	10.00	0	98.2	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22848** RunNo: **22848**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **674415** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R22848** RunNo: **22848**
Prep Date: Analysis Date: **11/26/2014** SeqNo: **674416** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0	104	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R22875** RunNo: **22875**
Prep Date: Analysis Date: **12/1/2014** SeqNo: **675391** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**			
Client ID: **LCSW**	Batch ID: **R22875**	RunNo: **22875**			
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675392**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	97.0	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	101	90	110			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB-16411** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **16411** RunNo: **22596**
Prep Date: **11/17/2014** Analysis Date: **11/17/2014** SeqNo: **666120** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		122	59	141			

Sample ID **LCS-16411** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **16411** RunNo: **22596**
Prep Date: **11/17/2014** Analysis Date: **11/17/2014** SeqNo: **666121** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.3	1.0	5.000	0	126	69.7	142			
Surr: DNOP	0.72		0.5000		144	59	141			S

Sample ID **MB-16415** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **16415** RunNo: **22594**
Prep Date: **11/17/2014** Analysis Date: **11/18/2014** SeqNo: **666747** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		101	59	141			

Sample ID **LCS-16415** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **16415** RunNo: **22594**
Prep Date: **11/17/2014** Analysis Date: **11/18/2014** SeqNo: **666748** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	93.6	69.7	142			
Surr: DNOP	0.60		0.5000		119	59	141			

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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R22597** RunNo: **22597**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666073** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		85.8	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R22597** RunNo: **22597**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666074** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	94.3	80	120			
Surr: BFB	19		20.00		93.0	80	120			

Sample ID **1411590-001BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-10** Batch ID: **R22597** RunNo: **22597**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666076** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	100	2.5	25.00	84.35	72.9	70.4	127			
Surr: BFB	1100		1000		106	80	120			

Sample ID **1411590-001BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-10** Batch ID: **R22597** RunNo: **22597**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666077** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	100	2.5	25.00	84.35	62.1	70.4	127	2.66	20	S
Surr: BFB	1000		1000		105	80	120	0	0	

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R22618** RunNo: **22618**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **667070** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.4	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R22618** RunNo: **22618**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **667071** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R22618**	RunNo:	**22618**
Prep Date:		Analysis Date:	**11/18/2014**	SeqNo:	**667071** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.8	80	120			
Surr: BFB	19		20.00		94.0	80	120			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22601**	RunNo: **22601**			
Prep Date:	Analysis Date: **11/17/2014**	SeqNo: **666323**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22601** RunNo: **22601**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666323** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.7	70	130			
Surr: 4-Bromofluorobenzene	13		10.00		133	70	130			S
Surr: Dibromofluoromethane	8.1		10.00		81.3	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22601** RunNo: **22601**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666326** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	22	1.0	20.00	0	112	80	120			
Chlorobenzene	20	1.0	20.00	0	98.7	70	130			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22601** RunNo: **22601**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666326** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	97.0	82.6	131			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	13		10.00		133	70	130			S
Surr: Dibromofluoromethane	9.1		10.00		90.9	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			

Sample ID **1411590-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-10** Batch ID: **R22601** RunNo: **22601**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666331** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12000	20	400.0	10900	215	70	130			ES
Toluene	23000	20	400.0	21700	427	70	130			ES
Chlorobenzene	430	20	400.0	0	107	70	130			
1,1-Dichloroethene	380	20	400.0	9.024	93.5	70	130			
Trichloroethene (TCE)	400	20	400.0	0	99.1	70	130			
Surr: 1,2-Dichloroethane-d4	200		200.0		101	70	130			
Surr: 4-Bromofluorobenzene	190		200.0		94.7	70	130			
Surr: Dibromofluoromethane	170		200.0		84.0	70	130			
Surr: Toluene-d8	200		200.0		98.3	70	130			

Sample ID **1411590-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-10** Batch ID: **R22601** RunNo: **22601**
Prep Date: Analysis Date: **11/17/2014** SeqNo: **666332** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11000	20	400.0	10900	43.7	70	130	5.99	20	ES
Toluene	21000	20	400.0	21700	-190	70	130	11.1	20	ES
Chlorobenzene	400	20	400.0	0	100	70	130	6.34	20	
1,1-Dichloroethene	360	20	400.0	9.024	88.7	70	130	5.10	20	
Trichloroethene (TCE)	380	20	400.0	0	94.2	70	130	5.06	20	
Surr: 1,2-Dichloroethane-d4	190		200.0		96.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	180		200.0		92.3	70	130	0	0	
Surr: Dibromofluoromethane	170		200.0		85.5	70	130	0	0	
Surr: Toluene-d8	190		200.0		92.5	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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R22619**	RunNo: **22619**			
Prep Date:	Analysis Date: **11/18/2014**	SeqNo: **667072**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22619** RunNo: **22619**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **667072** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.1	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		141	70	130			S
Surr: Dibromofluoromethane	9.0		10.00		89.6	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22619** RunNo: **22619**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **667075** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22619** RunNo: **22619**
Prep Date: Analysis Date: **11/18/2014** SeqNo: **667075** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18	1.0	20.00	0	91.4	82.6	131			
Trichloroethene (TCE)	20	1.0	20.00	0	98.2	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		140	70	130			S
Surr: Dibromofluoromethane	9.7		10.00		97.2	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R22714** RunNo: **22714**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **669903** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		136	70	130			S
Surr: Dibromofluoromethane	9.4		10.00		94.4	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R22714** RunNo: **22714**
Prep Date: Analysis Date: **11/21/2014** SeqNo: **669905** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.5	70	130			
Surr: 4-Bromofluorobenzene	14		10.00		136	70	130			S
Surr: Dibromofluoromethane	9.3		10.00		93.3	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **mb-16427**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **16427**	RunNo: **22650**			
Prep Date: **11/18/2014**	Analysis Date: **11/19/2014**	SeqNo: **667984**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID	**mb-16427**	SampType:	**MBLK**	TestCode:	**EPA Method 8270C: Semivolatiles**		
Client ID:	**PBW**	Batch ID:	**16427**	RunNo:	**22650**		
Prep Date:	**11/18/2014**	Analysis Date:	**11/19/2014**	SeqNo:	**667984**	Units:	**µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		67.4	17.6	104			
Surr: Phenol-d5	120		200.0		62.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	110		200.0		56.7	16.3	122			
Surr: Nitrobenzene-d5	68		100.0		68.0	45.3	117			
Surr: 2-Fluorobiphenyl	67		100.0		67.5	43	113			
Surr: 4-Terphenyl-d14	72		100.0		72.3	47.6	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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **lcs-16427** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **16427** RunNo: **22650**
Prep Date: **11/18/2014** Analysis Date: **11/19/2014** SeqNo: **667985** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	62	10	100.0	0	62.4	47.9	114			
4-Chloro-3-methylphenol	140	10	200.0	0	71.1	51.7	122			
2-Chlorophenol	140	10	200.0	0	68.2	40.7	113			
1,4-Dichlorobenzene	60	10	100.0	0	60.1	39.6	99.9			
2,4-Dinitrotoluene	56	10	100.0	0	56.4	40.8	113			
N-Nitrosodi-n-propylamine	67	10	100.0	0	66.7	51.2	111			
4-Nitrophenol	140	10	200.0	0	70.4	15.7	86.9			
Pentachlorophenol	98	20	200.0	0	49.1	21.6	104			
Phenol	140	10	200.0	0	69.2	28.6	71.7			
Pyrene	61	10	100.0	0	60.6	54.2	128			
1,2,4-Trichlorobenzene	59	10	100.0	0	59.4	40.9	101			
Surr: 2-Fluorophenol	120		200.0		61.4	17.6	104			
Surr: Phenol-d5	120		200.0		62.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	130		200.0		64.7	16.3	122			
Surr: Nitrobenzene-d5	60		100.0		60.4	45.3	117			
Surr: 2-Fluorobiphenyl	58		100.0		58.2	43	113			
Surr: 4-Terphenyl-d14	70		100.0		70.2	47.6	122			

Sample ID **lcsd-16427** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **16427** RunNo: **22650**
Prep Date: **11/18/2014** Analysis Date: **11/19/2014** SeqNo: **667986** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	73.4	47.9	114	16.1	27.2	
4-Chloro-3-methylphenol	160	10	200.0	0	80.2	51.7	122	12.0	25.9	
2-Chlorophenol	160	10	200.0	0	77.8	40.7	113	13.2	22.5	
1,4-Dichlorobenzene	70	10	100.0	0	69.7	39.6	99.9	14.8	24.6	
2,4-Dinitrotoluene	70	10	100.0	0	69.6	40.8	113	20.9	25.3	
N-Nitrosodi-n-propylamine	78	10	100.0	0	77.7	51.2	111	15.2	23.6	
4-Nitrophenol	170	10	200.0	0	85.3	15.7	86.9	19.1	34.7	
Pentachlorophenol	110	20	200.0	0	57.5	21.6	104	15.7	32.8	
Phenol	160	10	200.0	0	81.8	28.6	71.7	16.7	25.5	S
Pyrene	63	10	100.0	0	63.2	54.2	128	4.14	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	66.0	40.9	101	10.6	25.9	
Surr: 2-Fluorophenol	150		200.0		75.0	17.6	104	0	0	
Surr: Phenol-d5	140		200.0		72.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	140		200.0		71.8	16.3	122	0	0	
Surr: Nitrobenzene-d5	67		100.0		67.1	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	69		100.0		69.4	43	113	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.
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#: **1411590**
11-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID	**lcsd-16427**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**16427**	RunNo:	**22650**
Prep Date:	**11/18/2014**	Analysis Date:	**11/19/2014**	SeqNo:	**667986** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	75		100.0		74.6	47.6	122	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1411590 RcptNo: 1

Received by/date: SM 11/15/2014

Logged By: **Ashley Gallegos** 11/15/2014 9:15:00 AM

Completed By: **Ashley Gallegos** 11/17/2014 8:56:04 AM

Reviewed By: CS 11/17/14

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° 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 ☑ CS 11/17/14
9. Was preservative added to bottles? Yes ☑ No ☑ NA ☐

metals analysis, added 0.4ml HNO_3 to -003G, -010G, -012G and -013G; added 1 ml HNO_3 to -001

10. VOA vials have zero headspace? Yes ☑ No ☐ No VOA Vials ☐ added 2 ml HNO_3 to -001
11. Were any sample containers received broken? Yes ☐ No ☑ ~~For 300 analysis, added 1 ml H_2SO_4 to~~ -001E
12. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH:	30
(<2 or >12 unless noted)	Held metals login for 24 hrs.
Adjusted?	yes
Checked by:	CS

CS 11/17/14

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	1.9	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

Q4 2014

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411590	8260B + MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major cations/anions										Air Bubbles (Y or N)
11-14-14	1010	AQ	MKTF-10	11		-001	X	X	X	X	X	X										
11-14-14	1013	AQ	MKTF-09	11		-002	X	X	X	X	X	X										
11-14-14	1145	AQ	MKTF-02	11		-003	X	X	X	X	X	X										
11-14-14	—	AQ	BD-111414	1		-004			X													
11-14-14	—	AQ	BD-111414	1		-005			X													
11-14-14	~~1218~~	AQ	MKTF-26	11		-006	X	X	X	X	X	X										
11-14-14	1221	AQ	MKTF-27	11		-007	X	X	X	X	X	X										
11-14-14	1355	AQ	MKTF-28	11		-008	X	X	X	X	X	X										
11-14-14	1540	AQ	MKTF-24	11		-009	X	X	X	X	X	X										
11-14-14	1533	AQ	MKTF-25	11		-010	X	X	X	X	X	X										
11-14-14	—	AQ	TB-501	3		-011	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-15-14	845	Rex Lowder	[illegible]	11/15/14	9:15
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Page 1 of 3

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.

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ Rush

Project Name:

Q4 2014

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature: 1.9°C

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 8

Tel. 505-345-3975 Fax 505-345-410

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411590	8260B + MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major cations/anions
11-13-14	1545	AQ	MKTF-04	11		-012	X	X	X	X	X	X
11-13-14	1642	AQ	MKTF-11	11		-013	X	X	X	X	X	X

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-15-14	845	Pam Landers	Stacy Neg	11/15/14	9:15
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type) Trihydro Format

Turn-Around Time:

X Standard ☐ Rush

Project Name:

Q4 2014

Project #:

MKTF WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature: 1.9°C

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411570	8260B + MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Major cations/anions										Air Bubbles (Y or N)
11-14-14	1545	AQ	EB-111414	3		-014	X															
11-14-14	1550	AQ	FB-111414	3		-015	X															
11-14-14	—	AQ	TB-502	3		-016	X															
~~11-14-14~~	~~—~~	~~AQ~~	~~TB-503~~	~~2~~			~~X~~															

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-15-14	845	Pat Landers / Pat Landers	[illegible]	11/15/14	9:15
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Page 2 of 3

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.

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

April 20, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1ST QTR (MKTF) OrderNo.: 1503835

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/18/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 7:00:00 AM
Lab ID: 1503835-001
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Toluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Ethylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Naphthalene	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1-Methylnaphthalene	ND	4.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Methylnaphthalene	ND	4.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Acetone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromoform	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromomethane	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Butanone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Carbon disulfide	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chloroethane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chloroform	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chloromethane	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1-Dichloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1-Dichloroethene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dichloropropane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 7:00:00 AM
Lab ID: 1503835-001
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Hexanone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Isopropylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
4-Isopropyltoluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
n-Butylbenzene	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
n-Propylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
sec-Butylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Styrene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Trichlorofluoromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Xylenes, Total	ND	1.5		µg/L	1	3/19/2015 11:58:04 PM	R24939
Surr: 1,2-Dichloroethane-d4	81.1	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939
Surr: 4-Bromofluorobenzene	89.3	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939
Surr: Dibromofluoromethane	82.5	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939
Surr: Toluene-d8	92.4	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 9:50:00 AM
Lab ID: 1503835-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	4.5	1.0		mg/L	1	3/19/2015 11:10:52 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 11:10:52 PM	18212
Surr: DNOP	99.9	76.5-150		%REC	1	3/19/2015 11:10:52 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	11	0.25		mg/L	5	3/24/2015 11:03:06 PM	R25029
Surr: BFB	186	80-120	S	%REC	5	3/24/2015 11:03:06 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.16	0.0020		mg/L	1	3/25/2015 10:18:46 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:18:46 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:18:46 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:18:46 PM	R25072
Iron	1.1	0.10	*	mg/L	5	3/31/2015 3:43:58 PM	R25194
Manganese	2.7	0.010	*	mg/L	5	3/31/2015 3:43:58 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:18:46 PM	R25072
Zinc	0.029	0.010		mg/L	1	3/25/2015 10:18:46 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.23	0.0020		mg/L	1	3/31/2015 6:36:11 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:35:27 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:35:27 PM	18338
Copper	0.012	0.0060		mg/L	1	3/31/2015 6:36:11 PM	18338
Iron	5.1	0.20	*	mg/L	10	3/31/2015 6:38:06 PM	18338
Manganese	2.9	0.020	*	mg/L	10	3/31/2015 6:38:06 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:35:27 PM	18338
Zinc	0.14	0.010		mg/L	1	3/31/2015 6:36:11 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	ND	0.0050		mg/L	5	4/2/2015 5:10:38 PM	R25250
Lead	0.0071	0.0010		mg/L	1	4/2/2015 5:01:29 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:58:02 PM	R25250
Uranium	0.021	0.0010		mg/L	1	4/2/2015 5:01:29 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0032	0.0010		mg/L	1	3/27/2015 4:48:19 PM	18338
Lead	0.030	0.0010	*	mg/L	1	3/27/2015 4:48:19 PM	18338
Selenium	0.0036	0.0010		mg/L	1	3/27/2015 4:48:19 PM	18338
Uranium	0.026	0.0010		mg/L	1	3/27/2015 4:48:19 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:23:53 PM	18400

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 9:50:00 AM
Lab ID: 1503835-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 9:50:00 AM
Lab ID: 1503835-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1-Methylnaphthalene	72	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Methylnaphthalene	96	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Methylphenol	33	10		µg/L	1	3/24/2015 11:37:21 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Naphthalene	160	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Surr: 2-Fluorophenol	78.3	17.6-104		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: Phenol-d5	58.0	17.7-89.9		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: 2,4,6-Tribromophenol	109	16.3-122		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: Nitrobenzene-d5	69.4	45.3-117		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: 2-Fluorobiphenyl	88.4	43-113		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: 4-Terphenyl-d14	79.0	47.6-122		%REC	1	3/24/2015 11:37:21 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 9:50:00 AM
Lab ID: 1503835-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	820	100		µg/L	100	3/20/2015 2:36:01 PM	R24984
Toluene	270	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
Ethylbenzene	29	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Methyl tert-butyl ether (MTBE)	57	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,4-Trimethylbenzene	240	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
1,3,5-Trimethylbenzene	110	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
1,2-Dichloroethane (EDC)	9.1	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Naphthalene	88	20		µg/L	10	3/20/2015 3:04:46 PM	R24984
1-Methylnaphthalene	30	4.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Methylnaphthalene	38	20		µg/L	10	3/20/2015 3:04:46 PM	R24984
Acetone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromoform	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromomethane	ND	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Butanone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Carbon disulfide	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chloroethane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chloroform	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chloromethane	ND	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1-Dichloroethane	18	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1-Dichloroethene	81	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
1,2-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 9:50:00 AM
Lab ID: 1503835-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Hexanone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Isopropylbenzene	47	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
4-Isopropyltoluene	4.5	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
n-Butylbenzene	20	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
n-Propylbenzene	56	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
sec-Butylbenzene	7.3	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Styrene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,1-Trichloroethane	8.7	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,2-Trichloroethane	2.2	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Trichloroethene (TCE)	120	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
Trichlorofluoromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Xylenes, Total	490	15		µg/L	10	3/20/2015 3:04:46 PM	R24984
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939
Surr: 4-Bromofluorobenzene	82.6	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939
Surr: Dibromofluoromethane	123	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939
Surr: Toluene-d8	106	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:29:00 AM
Lab ID: 1503835-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	5.4	1.0		mg/L	1	3/19/2015 11:32:28 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 11:32:28 PM	18212
Surr: DNOP	111	76.5-150		%REC	1	3/19/2015 11:32:28 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.8	0.25		mg/L	5	3/24/2015 11:32:16 PM	R25029
Surr: BFB	101	80-120		%REC	5	3/24/2015 11:32:16 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.5	0.010	*	mg/L	5	3/31/2015 3:46:03 PM	R25194
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:20:49 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:20:49 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:20:49 PM	R25072
Iron	3.8	0.10	*	mg/L	5	3/31/2015 3:46:03 PM	R25194
Manganese	1.8	0.010	*	mg/L	5	3/31/2015 3:46:03 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:20:49 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:20:49 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	3.5	0.020	*	mg/L	10	3/31/2015 6:48:07 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:37:21 PM	18338
Chromium	0.012	0.0060		mg/L	1	3/26/2015 6:37:21 PM	18338
Copper	0.011	0.0060		mg/L	1	3/31/2015 6:46:09 PM	18338
Iron	14	1.0	*	mg/L	50	3/31/2015 6:49:55 PM	18338
Manganese	2.7	0.020	*	mg/L	10	3/31/2015 6:48:07 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:37:21 PM	18338
Zinc	0.051	0.010		mg/L	1	3/31/2015 6:46:09 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	4/6/2015 7:52:24 PM	R25331
Lead	ND	0.0010		mg/L	1	4/4/2015 7:28:51 PM	R25304
Selenium	ND	0.010		mg/L	10	4/6/2015 7:52:24 PM	R25331
Uranium	ND	0.0010		mg/L	1	4/4/2015 7:28:51 PM	R25304
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0031	0.0010		mg/L	1	3/27/2015 4:51:30 PM	18338
Lead	0.021	0.0010	*	mg/L	1	3/27/2015 4:51:30 PM	18338
Selenium	ND	0.010		mg/L	10	3/31/2015 5:26:55 PM	18338
Uranium	0.0026	0.0010		mg/L	1	3/27/2015 4:51:30 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:25:41 PM	18400

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:29:00 AM
Lab ID: 1503835-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Acenaphthylene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Aniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Anthracene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Azobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzoic acid	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzyl alcohol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Carbazole	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Chloroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Chlorophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Chrysene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Dibenzofuran	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Diethyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250

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Qualifiers:

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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 Not In Range
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:29:00 AM
Lab ID: 1503835-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Fluoranthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Fluorene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachloroethane	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Isophorone	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1-Methylnaphthalene	100	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Methylnaphthalene	28	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Methylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Naphthalene	32	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
3-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Nitrobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Pentachlorophenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
Phenanthrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Phenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Pyrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Pyridine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Surr: 2-Fluorophenol	68.9	17.6-104		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: Phenol-d5	58.1	17.7-89.9		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: 2,4,6-Tribromophenol	97.1	16.3-122		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: Nitrobenzene-d5	74.7	45.3-117		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: 2-Fluorobiphenyl	85.2	43-113		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: 4-Terphenyl-d14	78.2	47.6-122		%REC	1	3/25/2015 12:05:16 AM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:29:00 AM
Lab ID: 1503835-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	58	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Toluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Ethylbenzene	17	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Methyl tert-butyl ether (MTBE)	91	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,4-Trimethylbenzene	65	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,3,5-Trimethylbenzene	19	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Naphthalene	36	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
1-Methylnaphthalene	88	20		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Methylnaphthalene	25	20		µg/L	5	3/20/2015 3:33:25 PM	R24984
Acetone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromodichloromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromoform	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromomethane	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Butanone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Carbon disulfide	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Carbon Tetrachloride	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chloroethane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chloroform	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chloromethane	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Chlorotoluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
4-Chlorotoluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
cis-1,2-DCE	5.6	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Dibromochloromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Dibromomethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1-Dichloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1-Dichloroethene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dichloropropane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,3-Dichloropropane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
2,2-Dichloropropane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-18
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:29:00 AM
Lab ID: 1503835-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Hexachlorobutadiene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Hexanone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Isopropylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
4-Isopropyltoluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
4-Methyl-2-pentanone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Methylene Chloride	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
n-Butylbenzene	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
n-Propylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
sec-Butylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Styrene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
tert-Butylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
trans-1,2-DCE	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Trichlorofluoromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,3-Trichloropropane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Vinyl chloride	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Xylenes, Total	29	7.5		µg/L	5	3/20/2015 3:33:25 PM	R24984
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984
Surr: 4-Bromofluorobenzene	107	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984
Surr: Dibromofluoromethane	87.4	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984
Surr: Toluene-d8	90.3	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:53:00 AM
Lab ID: 1503835-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	10	1.0		mg/L	1	3/19/2015 11:53:49 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 11:53:49 PM	18212
Surr: DNOP	110	76.5-150		%REC	1	3/19/2015 11:53:49 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	38	5.0		mg/L	100	3/25/2015 12:01:32 AM	R25029
Surr: BFB	91.0	80-120		%REC	100	3/25/2015 12:01:32 AM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	6.4	0.020	*	mg/L	10	3/31/2015 3:48:08 PM	R25194
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:31:03 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:31:03 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:31:03 PM	R25072
Iron	19	1.0	*	mg/L	50	3/31/2015 4:02:53 PM	R25194
Manganese	2.6	0.020	*	mg/L	10	3/31/2015 3:48:08 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:31:03 PM	R25072
Zinc	0.047	0.010		mg/L	1	3/25/2015 10:31:03 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	7.0	0.020	*	mg/L	10	3/31/2015 6:53:32 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:39:14 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:39:14 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 6:51:53 PM	18338
Iron	22	1.0	*	mg/L	50	3/31/2015 6:55:20 PM	18338
Manganese	2.8	0.020	*	mg/L	10	3/31/2015 6:53:32 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:39:14 PM	18338
Zinc	0.028	0.010		mg/L	1	3/31/2015 6:51:53 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.015	0.010	*	mg/L	10	4/6/2015 7:55:28 PM	R25331
Lead	0.0034	0.0010		mg/L	1	4/4/2015 7:31:54 PM	R25304
Selenium	ND	0.010		mg/L	10	4/6/2015 7:55:28 PM	R25331
Uranium	ND	0.0010		mg/L	1	4/4/2015 7:31:54 PM	R25304
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.016	0.0010	*	mg/L	1	3/27/2015 4:54:41 PM	18338
Lead	0.015	0.0010	*	mg/L	1	3/27/2015 4:54:41 PM	18338
Selenium	0.0057	0.0010		mg/L	1	3/27/2015 4:54:41 PM	18338
Uranium	0.0016	0.0010		mg/L	1	3/27/2015 4:54:41 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:27:32 PM	18400

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:53:00 AM
Lab ID: 1503835-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Acenaphthylene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Aniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Anthracene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Azobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzoic acid	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzyl alcohol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Carbazole	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Chloroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Chlorophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Chrysene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Dibenzofuran	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Diethyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:53:00 AM
Lab ID: 1503835-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Fluoranthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Fluorene	10	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachloroethane	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Isophorone	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1-Methylnaphthalene	240	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Methylnaphthalene	390	50		µg/L	5	3/25/2015 12:06:09 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Naphthalene	470	50		µg/L	5	3/25/2015 12:06:09 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
3-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Nitrobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Pentachlorophenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
Phenanthrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Phenol	44	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Pyrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Pyridine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Surr: 2-Fluorophenol	79.0	17.6-104		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: Phenol-d5	63.9	17.7-89.9		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: 2,4,6-Tribromophenol	108	16.3-122		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: Nitrobenzene-d5	81.7	45.3-117		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: 2-Fluorobiphenyl	95.3	43-113		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: 4-Terphenyl-d14	85.7	47.6-122		%REC	1	3/25/2015 12:32:54 AM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:53:00 AM
Lab ID: 1503835-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	8300	1000		µg/L	1E	3/20/2015 4:02:03 PM	R24984
Toluene	23	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Ethylbenzene	1400	100		µg/L	100	3/20/2015 1:24:05 AM	R24939
Methyl tert-butyl ether (MTBE)	8300	1000		µg/L	1E	3/20/2015 4:02:03 PM	R24984
1,2,4-Trimethylbenzene	31	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Naphthalene	430	200		µg/L	100	3/20/2015 1:24:05 AM	R24939
1-Methylnaphthalene	260	40		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Methylnaphthalene	510	400		µg/L	100	3/20/2015 1:24:05 AM	R24939
Acetone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromodichloromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromoform	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromomethane	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Butanone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Carbon disulfide	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Carbon Tetrachloride	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chloroethane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chloroform	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chloromethane	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Chlorotoluene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
4-Chlorotoluene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
cis-1,2-DCE	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Dibromochloromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Dibromomethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,3-Dichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,4-Dichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Dichlorodifluoromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1-Dichloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1-Dichloroethene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dichloropropane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,3-Dichloropropane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
2,2-Dichloropropane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 10:53:00 AM
Lab ID: 1503835-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Hexachlorobutadiene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Hexanone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Isopropylbenzene	30	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
4-Isopropyltoluene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
4-Methyl-2-pentanone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Methylene Chloride	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
n-Butylbenzene	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
n-Propylbenzene	81	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
sec-Butylbenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Styrene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
tert-Butylbenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
trans-1,2-DCE	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,1-Trichloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,2-Trichloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Trichloroethene (TCE)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Trichlorofluoromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2,3-Trichloropropane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Vinyl chloride	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Xylenes, Total	78	15		µg/L	10	3/20/2015 1:52:44 AM	R24939
Surr: 1,2-Dichloroethane-d4	84.6	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939
Surr: Dibromofluoromethane	91.7	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939
Surr: Toluene-d8	92.1	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 11:25:00 AM
Lab ID: 1503835-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	6.0	1.0		mg/L	1	3/20/2015 12:15:11 AM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/20/2015 12:15:11 AM	18212
Surr: DNOP	120	76.5-150		%REC	1	3/20/2015 12:15:11 AM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	3.7	0.25		mg/L	5	3/25/2015 12:30:48 AM	R25029
Surr: BFB	104	80-120		%REC	5	3/25/2015 12:30:48 AM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.31	0.0020		mg/L	1	3/31/2015 3:50:16 PM	R25194
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:32:43 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:32:43 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:32:43 PM	R25072
Iron	3.6	0.10	*	mg/L	5	3/31/2015 3:59:27 PM	R25194
Manganese	3.5	0.010	*	mg/L	5	3/31/2015 3:59:27 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:32:43 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:32:43 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	8.2	0.020	*	mg/L	10	3/31/2015 6:57:35 PM	18395
Cadmium	ND	0.0020		mg/L	1	3/30/2015 8:21:05 PM	18395
Chromium	0.013	0.0060		mg/L	1	3/30/2015 8:21:05 PM	18395
Copper	0.025	0.0060		mg/L	1	3/30/2015 8:21:05 PM	18395
Iron	15	1.0	*	mg/L	50	3/31/2015 6:59:27 PM	18395
Manganese	6.3	0.020	*	mg/L	10	3/31/2015 6:57:35 PM	18395
Silver	ND	0.0050		mg/L	1	3/30/2015 8:21:05 PM	18395
Zinc	0.062	0.010		mg/L	1	3/30/2015 8:21:05 PM	18395
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	4/6/2015 7:58:31 PM	R25331
Lead	0.0011	0.0010		mg/L	1	4/4/2015 7:34:58 PM	R25304
Selenium	ND	0.010		mg/L	10	4/6/2015 7:58:31 PM	R25331
Uranium	0.0026	0.0010		mg/L	1	4/4/2015 7:34:58 PM	R25304
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0040	0.0010		mg/L	1	3/31/2015 6:14:47 PM	18395
Lead	0.034	0.0010	*	mg/L	1	3/31/2015 6:14:47 PM	18395
Selenium	ND	0.0050		mg/L	5	4/3/2015 12:37:28 PM	18395
Uranium	0.0053	0.0010		mg/L	1	3/31/2015 6:14:47 PM	18395
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:29:14 PM	18400

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 11:25:00 AM
Lab ID: 1503835-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Acenaphthylene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Aniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Anthracene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Azobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzoic acid	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzyl alcohol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Carbazole	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Chloroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Chlorophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Chrysene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Dibenzofuran	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Diethyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 11:25:00 AM
Lab ID: 1503835-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Fluoranthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Fluorene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachloroethane	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Isophorone	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Methylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Naphthalene	28	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Nitroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
3-Nitroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Nitroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Nitrobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Nitrophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Nitrophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Pentachlorophenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
Phenanthrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Phenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Pyrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Pyridine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Surr: 2-Fluorophenol	77.7	17.6-104		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: Phenol-d5	66.2	17.7-89.9		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: 2,4,6-Tribromophenol	112	16.3-122		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: Nitrobenzene-d5	87.6	45.3-117		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: 2-Fluorobiphenyl	89.5	43-113		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: 4-Terphenyl-d14	84.2	47.6-122		%REC	1	3/25/2015 1:00:39 AM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 11:25:00 AM
Lab ID: 1503835-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	470	20		µg/L	20	3/20/2015 4:30:46 PM	R24984
Toluene	5.2	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Ethylbenzene	320	20		µg/L	20	3/20/2015 4:30:46 PM	R24984
Methyl tert-butyl ether (MTBE)	33	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,4-Trimethylbenzene	34	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,3,5-Trimethylbenzene	46	20		µg/L	20	3/20/2015 4:30:46 PM	R24984
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Naphthalene	36	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1-Methylnaphthalene	7.7	4.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Methylnaphthalene	6.3	4.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Acetone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromoform	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromomethane	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Butanone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Carbon disulfide	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chloroethane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chloroform	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chloromethane	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1-Dichloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1-Dichloroethene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015 11:25:00 AM
Lab ID: 1503835-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Hexanone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Isopropylbenzene	8.2	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
4-Isopropyltoluene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
n-Butylbenzene	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
n-Propylbenzene	35	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
sec-Butylbenzene	1.8	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Styrene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Trichlorofluoromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Xylenes, Total	170	1.5		µg/L	1	3/20/2015 2:21:24 AM	R24939
Surr: 1,2-Dichloroethane-d4	84.8	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939
Surr: Dibromofluoromethane	97.5	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939
Surr: Toluene-d8	105	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015
Lab ID: 1503835-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Aniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Anthracene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Azobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzoic acid	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-ethylhexyl)phthalate	17	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Carbazole	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Chrysene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/17/2015
Lab ID: 1503835-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Fluoranthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Fluorene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Isophorone	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1-Methylnaphthalene	100	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Methylnaphthalene	140	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Naphthalene	120	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
Phenanthrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Phenol	97	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Pyrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Pyridine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Surr: 2-Fluorophenol	38.4	17.6-104		%REC	1	3/26/2015 3:05:16 PM	18250
Surr: Phenol-d5	32.4	17.7-89.9		%REC	1	3/26/2015 3:05:16 PM	18250
Surr: 2,4,6-Tribromophenol	29.0	16.3-122		%REC	1	3/26/2015 3:05:16 PM	18250
Surr: Nitrobenzene-d5	30.2	45.3-117	S	%REC	1	3/26/2015 3:05:16 PM	18250
Surr: 2-Fluorobiphenyl	22.2	43-113	S	%REC	1	3/26/2015 3:05:16 PM	18250
Surr: 4-Terphenyl-d14	21.6	47.6-122	S	%REC	1	3/26/2015 3:05:16 PM	18250

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503835-007
Matrix: TRIP BLANK
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/25/2015 1:00:01 AM	R25029
Surr: BFB	88.3	80-120		%REC	1	3/25/2015 1:00:01 AM	R25029
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Toluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Ethylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Naphthalene	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1-Methylnaphthalene	ND	4.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Methylnaphthalene	ND	4.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Acetone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromoform	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromomethane	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Butanone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Carbon disulfide	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chloroethane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chloroform	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chloromethane	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1-Dichloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1-Dichloroethene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503835-007
Matrix: TRIP BLANK
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Hexanone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Isopropylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
4-Isopropyltoluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
n-Butylbenzene	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
n-Propylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
sec-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Styrene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Trichlorofluoromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Xylenes, Total	ND	1.5		µg/L	1	3/20/2015 2:50:06 AM	R24939
Surr: 1,2-Dichloroethane-d4	81.6	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939
Surr: Dibromofluoromethane	88.2	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939
Surr: Toluene-d8	92.7	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739897** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25194** RunNo: **25194**
Prep Date: Analysis Date: **3/31/2015** SeqNo: **744541** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25194** RunNo: **25194**
Prep Date: Analysis Date: **3/31/2015** SeqNo: **744542** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.8	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Manganese	0.47	0.0020	0.5000	0	94.5	85	115			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18338** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18338** RunNo: **25098**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **740873** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-18338** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18338** RunNo: **25098**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **740874** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.49	0.0060	0.5000	0	98.0	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.6	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.48	0.010	0.5000	0	95.1	85	115			

Sample ID **MB-18395** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18395** RunNo: **25178**
Prep Date: **3/28/2015** Analysis Date: **3/30/2015** SeqNo: **744123** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS-18395** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18395** RunNo: **25178**
Prep Date: **3/28/2015** Analysis Date: **3/30/2015** SeqNo: **744124** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.6	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.50	0.0060	0.5000	0	101	85	115			
Iron	0.50	0.020	0.5000	0	99.2	85	115			
Manganese	0.49	0.0020	0.5000	0	97.6	85	115			
Silver	0.11	0.0050	0.1000	0	110	85	115			
Zinc	0.50	0.010	0.5000	0	101	85	115			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503835-002EMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-37** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747257** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.12	0.0050	0.1250	0.002789	94.8	70	130			

Sample ID **1503835-002EMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-37** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747258** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.032	0.0010	0.02500	0.007137	98.9	70	130			
Uranium	0.046	0.0010	0.02500	0.02101	98.8	70	130			

Sample ID **1503835-002EMSD** SampType: **MSD** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-37** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747259** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.12	0.0050	0.1250	0.002789	93.9	70	130	0.922	20	

Sample ID **1503835-002EMSD** SampType: **MSD** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-37** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747260** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.032	0.0010	0.02500	0.007137	99.8	70	130	0.677	20	
Uranium	0.046	0.0010	0.02500	0.02101	100	70	130	0.674	20	

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747261** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.8	85	115			
Lead	0.025	0.0010	0.02500	0	98.3	85	115			
Selenium	0.023	0.0010	0.02500	0	92.6	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747262** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747262** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25304** RunNo: **25304**
Prep Date: Analysis Date: **4/4/2015** SeqNo: **748545** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.023	0.0010	0.02500	0	94.0	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25304** RunNo: **25304**
Prep Date: Analysis Date: **4/4/2015** SeqNo: **748546** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25331** RunNo: **25331**
Prep Date: Analysis Date: **4/6/2015** SeqNo: **749539** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.6	85	115			
Selenium	0.024	0.0010	0.02500	0	96.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25331** RunNo: **25331**
Prep Date: Analysis Date: **4/6/2015** SeqNo: **749540** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LLLCS-18338** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **18338** RunNo: **25145**
Prep Date: **3/25/2015** Analysis Date: **3/27/2015** SeqNo: **742934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.027	0.0010	0.02500	0	107	85	115			

Sample ID **MB-18338** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **18338** RunNo: **25145**
Prep Date: **3/25/2015** Analysis Date: **3/27/2015** SeqNo: **742936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LLLCS-18395** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **18395** RunNo: **25201**
Prep Date: **3/28/2015** Analysis Date: **3/31/2015** SeqNo: **744827** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	108	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			
Uranium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID **MB-18395** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **18395** RunNo: **25201**
Prep Date: **3/28/2015** Analysis Date: **3/31/2015** SeqNo: **744835** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**MB-18400**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**18400**	RunNo:	**25169**
Prep Date:	**3/30/2015**	Analysis Date:	**3/30/2015**	SeqNo:	**743606** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-18400**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**18400**	RunNo:	**25169**
Prep Date:	**3/30/2015**	Analysis Date:	**3/30/2015**	SeqNo:	**743607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	104	80	120			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18212**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range**							
Client ID: **PBW**	Batch ID: **18212**	RunNo: **24910**							
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734683**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		101	76.5	150			

Sample ID **LCS-18212**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range**							
Client ID: **LCSW**	Batch ID: **18212**	RunNo: **24910**							
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734684**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	60.1	156			
Surr: DNOP	0.54		0.5000		107	76.5	150			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**5ML RBC**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R25029**	RunNo:	**25029**
Prep Date:		Analysis Date:	**3/24/2015**	SeqNo:	**738548** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.0	80	120			

Sample ID	**2.5UG GRO LCSB**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R25029**	RunNo:	**25029**
Prep Date:		Analysis Date:	**3/24/2015**	SeqNo:	**738549** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	100	80	120			
Surr: BFB	19		20.00		93.3	80	120			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24939**	RunNo: **24939**			
Prep Date:	Analysis Date: **3/19/2015**	SeqNo: **734919**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24939** RunNo: **24939**
Prep Date: Analysis Date: **3/19/2015** SeqNo: **734919** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.5		10.00		75.1	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	7.9		10.00		79.2	70	130			
Surr: Toluene-d8	9.2		10.00		91.6	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24939** RunNo: **24939**
Prep Date: Analysis Date: **3/19/2015** SeqNo: **734921** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	19	1.0	20.00	0	96.6	70	130			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24939** RunNo: **24939**
Prep Date: Analysis Date: **3/19/2015** SeqNo: **734921** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	112	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.2		10.00		82.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.0	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24984** RunNo: **24984**
Prep Date: Analysis Date: **3/20/2015** SeqNo: **736450** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R24984**	RunNo: **24984**	
Prep Date:	Analysis Date: **3/20/2015**	SeqNo: **736450**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.7		10.00		76.8	70	130			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24984**	RunNo: **24984**			
Prep Date:	Analysis Date: **3/20/2015**	SeqNo: **736450**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	8.5		10.00		85.0	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

Sample ID **100ng lcs2**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R24984**	RunNo: **24984**			
Prep Date:	Analysis Date: **3/20/2015**	SeqNo: **736452**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	19	1.0	20.00	0	95.9	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18250**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18250**	RunNo: **25041**			
Prep Date: **3/20/2015**	Analysis Date: **3/24/2015**	SeqNo: **738605**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18250**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18250**	RunNo: **25041**			
Prep Date: **3/20/2015**	Analysis Date: **3/24/2015**	SeqNo: **738605**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	160		200.0		79.2	17.6	104			
Surr: Phenol-d5	160		200.0		79.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		87.6	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.5	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113			
Surr: 4-Terphenyl-d14	85		100.0		85.0	47.6	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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcs-18250** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18250** RunNo: **25041**
Prep Date: **3/20/2015** Analysis Date: **3/24/2015** SeqNo: **738606** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.3	47.8	99.7			
4-Chloro-3-methylphenol	170	10	200.0	0	85.2	58.1	103			
2-Chlorophenol	150	10	200.0	0	77.2	49.5	96.8			
1,4-Dichlorobenzene	75	10	100.0	0	75.0	40.4	89.4			
2,4-Dinitrotoluene	64	10	100.0	0	63.9	38.6	91.3			
N-Nitrosodi-n-propylamine	83	10	100.0	0	82.6	53.9	95.6			
4-Nitrophenol	150	10	200.0	0	73.9	26.4	108			
Pentachlorophenol	140	20	200.0	0	69.6	36.5	86.6			
Phenol	170	10	200.0	0	84.0	29.3	108			
Pyrene	80	10	100.0	0	79.7	45.7	100			
1,2,4-Trichlorobenzene	82	10	100.0	0	82.1	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		76.8	17.6	104			
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		85.3	16.3	122			
Surr: Nitrobenzene-d5	77		100.0		77.3	45.3	117			
Surr: 2-Fluorobiphenyl	77		100.0		77.1	43	113			
Surr: 4-Terphenyl-d14	86		100.0		85.7	47.6	122			

Sample ID **mb-18336** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **18336** RunNo: **25103**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **741043** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		78.7	17.6	104			
Surr: Phenol-d5	170		200.0		83.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	210		200.0		106	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.4	45.3	117			
Surr: 2-Fluorobiphenyl	76		100.0		76.0	43	113			
Surr: 4-Terphenyl-d14	91		100.0		91.4	47.6	122			

Sample ID **lcs-18336** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18336** RunNo: **25103**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **741044** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		82.3	17.6	104			
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		100	16.3	122			
Surr: Nitrobenzene-d5	75		100.0		75.4	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		79.7	43	113			

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 Not In Range
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#: **1503835**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**lcs-18336**	SampType:	**LCS**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSW**	Batch ID:	**18336**	RunNo:	**25103**
Prep Date:	**3/25/2015**	Analysis Date:	**3/26/2015**	SeqNo:	**741044** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	89		100.0		88.8	47.6	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1503835** RcptNo: **1**

Received by/date: CS 03/18/15

Logged By: **Ashley Gallegos** **3/18/2015 11:00:00 AM**

Completed By: **Ashley Gallegos** **3/18/2015 5:58:51 PM**

Reviewed By: 03/19/15

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° 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? Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

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	1.2	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503835	8260+MTBE	8015B (DRO/GRO/MRO)	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Air Bubbles (Y or N)
3/17/2015	700	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	-001	X					
3/17/2015	950	AQUEOUS	MKTF-37	MISC	MISC	-002	X	X	X	X	X	
3/17/2015	1029	AQUEOUS	MKTF-18	MISC	MISC	-003	X	X	X	X	X	
3/17/2015	1053	AQUEOUS	MKTF-36	MISC	MISC	-004	X	X	X	X	X	
3/17/2015	1125	AQUEOUS	MKTF-35	MISC	MISC	-005	X	X	X	X	X	
3/17/2015		AQUEOUS	BLIND DUPLICATE	1L Amber	None	-006			X			
3/17/2015		AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-007	X					

Date	Time	Relinquished by	Received by	Date	Time
3/18/15	1100		Celina Sanna	03/18/15	1100

Remarks:

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.

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

April 20, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1ST QTR (MKTF) OrderNo.: 1503834

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 12 sample(s) on 3/18/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503834**
Date Reported: **4/20/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 7:00:00 AM
Lab ID: 1503834-001
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Toluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Ethylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Naphthalene	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1-Methylnaphthalene	ND	4.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Methylnaphthalene	ND	4.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Acetone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromodichloromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromoform	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromomethane	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Butanone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Carbon disulfide	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Carbon Tetrachloride	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chloroethane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chloroform	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chloromethane	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Chlorotoluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
4-Chlorotoluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
cis-1,2-DCE	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Dibromochloromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Dibromomethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1-Dichloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1-Dichloroethene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dichloropropane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,3-Dichloropropane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2,2-Dichloropropane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 7:00:00 AM
Lab ID: 1503834-001
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Hexachlorobutadiene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Hexanone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Isopropylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
4-Isopropyltoluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
4-Methyl-2-pentanone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Methylene Chloride	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
n-Butylbenzene	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
n-Propylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
sec-Butylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Styrene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
tert-Butylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
trans-1,2-DCE	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Trichlorofluoromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Vinyl chloride	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Xylenes, Total	ND	1.5		µg/L	1	3/24/2015 2:47:38 PM	R25028
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028
Surr: Dibromofluoromethane	103	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028
Surr: Toluene-d8	93.6	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 10:50:00 AM
Lab ID: 1503834-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	3/19/2015 7:57:40 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 7:57:40 PM	18212
Surr: DNOP	109	76.5-150		%REC	1	3/19/2015 7:57:40 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	4.8	0.50		mg/L	10	3/24/2015 4:13:50 PM	R25029
Surr: BFB	99.9	80-120		%REC	10	3/24/2015 4:13:50 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.1	0.010		mg/L	5	3/26/2015 3:35:30 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:50:40 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:50:40 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:50:40 PM	R25072
Iron	2.0	0.10	*	mg/L	5	3/26/2015 3:35:30 PM	R25095
Manganese	1.9	0.010	*	mg/L	5	3/26/2015 3:35:30 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:50:40 PM	R25072
Zinc	0.021	0.010		mg/L	1	3/25/2015 9:50:40 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.8	0.010		mg/L	5	3/31/2015 5:33:01 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:04:06 PM	18338
Chromium	0.0092	0.0060		mg/L	1	3/26/2015 6:04:06 PM	18338
Copper	0.012	0.0060		mg/L	1	3/31/2015 5:31:13 PM	18338
Iron	11	0.40	*	mg/L	20	3/31/2015 5:34:50 PM	18338
Manganese	2.5	0.010	*	mg/L	5	3/31/2015 5:33:01 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:04:06 PM	18338
Zinc	0.030	0.010		mg/L	1	3/31/2015 5:31:13 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0097	0.0050		mg/L	5	3/30/2015 5:45:19 PM	R25155
Lead	ND	0.0050		mg/L	5	3/30/2015 5:45:19 PM	R25155
Selenium	ND	0.050		mg/L	50	3/30/2015 5:42:16 PM	R25155
Uranium	0.013	0.0050		mg/L	5	3/30/2015 5:45:19 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/27/2015 4:19:33 PM	18338
Lead	0.022	0.0010	*	mg/L	1	3/27/2015 4:09:59 PM	18338
Selenium	0.016	0.010		mg/L	10	3/27/2015 4:19:33 PM	18338
Uranium	0.017	0.0010		mg/L	1	3/27/2015 4:09:59 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:09:43 AM	18458

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 10:50:00 AM
Lab ID: 1503834-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Carbazole	14	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 10:50:00 AM
Lab ID: 1503834-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1-Methylnaphthalene	51	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Methylnaphthalene	25	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Naphthalene	59	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Surr: 2-Fluorophenol	60.7	17.6-104		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: Phenol-d5	64.4	17.7-89.9		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: 2,4,6-Tribromophenol	94.1	16.3-122		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: Nitrobenzene-d5	82.7	45.3-117		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: 2-Fluorobiphenyl	92.0	43-113		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: 4-Terphenyl-d14	93.2	47.6-122		%REC	1	3/24/2015 5:37:13 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 10:50:00 AM
Lab ID: 1503834-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	220	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Toluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Ethylbenzene	260	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Methyl tert-butyl ether (MTBE)	1200	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,4-Trimethylbenzene	200	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,3,5-Trimethylbenzene	24	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Naphthalene	170	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
1-Methylnaphthalene	96	40		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Methylnaphthalene	89	40		µg/L	10	3/24/2015 3:38:01 PM	R25028
Acetone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromodichloromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromoform	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromomethane	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Butanone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Carbon disulfide	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Carbon Tetrachloride	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chloroethane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chloroform	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chloromethane	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Chlorotoluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
4-Chlorotoluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
cis-1,2-DCE	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Dibromochloromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Dibromomethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,3-Dichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,4-Dichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Dichlorodifluoromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1-Dichloroethane	19	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1-Dichloroethene	32	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dichloropropane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,3-Dichloropropane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
2,2-Dichloropropane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 10:50:00 AM
Lab ID: 1503834-002
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Hexachlorobutadiene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Hexanone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Isopropylbenzene	10	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
4-Isopropyltoluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
4-Methyl-2-pentanone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Methylene Chloride	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
n-Butylbenzene	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
n-Propylbenzene	21	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
sec-Butylbenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Styrene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
tert-Butylbenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
trans-1,2-DCE	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,1-Trichloroethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,2-Trichloroethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Trichloroethene (TCE)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Trichlorofluoromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,3-Trichloropropane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Vinyl chloride	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Xylenes, Total	340	15		µg/L	10	3/24/2015 3:38:01 PM	R25028
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028
Surr: Dibromofluoromethane	93.7	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028
Surr: Toluene-d8	93.8	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:16:00 AM
Lab ID: 1503834-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	2.6	1.0		mg/L	1	3/19/2015 8:19:05 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 8:19:05 PM	18212
Surr: DNOP	116	76.5-150		%REC	1	3/19/2015 8:19:05 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	55	10		mg/L	200	3/24/2015 4:43:07 PM	R25029
Surr: BFB	88.8	80-120		%REC	200	3/24/2015 4:43:07 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.0	0.020		mg/L	10	3/26/2015 3:37:08 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:52:22 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:52:22 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:52:22 PM	R25072
Iron	4.8	0.20	*	mg/L	10	3/26/2015 3:37:08 PM	R25095
Manganese	2.9	0.020	*	mg/L	10	3/26/2015 3:37:08 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:52:22 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:52:22 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.9	0.010		mg/L	5	3/31/2015 5:38:33 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:05:55 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:05:55 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 5:36:47 PM	18338
Iron	10	0.40	*	mg/L	20	3/31/2015 5:40:24 PM	18338
Manganese	3.1	0.010	*	mg/L	5	3/31/2015 5:38:33 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:05:55 PM	18338
Zinc	0.024	0.010		mg/L	1	3/31/2015 5:36:47 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	0.0087	0.0010		mg/L	1	4/2/2015 4:05:23 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:05:23 PM	R25250
Selenium	0.0080	0.0050		mg/L	5	4/2/2015 5:19:48 PM	R25250
Uranium	0.0013	0.0010		mg/L	1	4/2/2015 4:05:23 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0086	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
Lead	0.0068	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
Selenium	0.0060	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
Uranium	0.0021	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:11:34 AM	18458

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:16:00 AM
Lab ID: 1503834-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Aniline	44	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4-Dimethylphenol	110	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:16:00 AM
Lab ID: 1503834-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1-Methylnaphthalene	25	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Methylnaphthalene	20	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Methylphenol	270	20		µg/L	2	3/25/2015 10:42:53 AM	18250
3+4-Methylphenol	240	10		µg/L	1	3/24/2015 6:05:29 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Naphthalene	69	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Phenol	52	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Surr: 2-Fluorophenol	58.0	17.6-104		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: Phenol-d5	59.3	17.7-89.9		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: 2,4,6-Tribromophenol	91.1	16.3-122		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: Nitrobenzene-d5	80.0	45.3-117		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: 2-Fluorobiphenyl	81.2	43-113		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: 4-Terphenyl-d14	80.9	47.6-122		%REC	1	3/24/2015 6:05:29 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:16:00 AM
Lab ID: 1503834-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	10000	200		µg/L	200	3/24/2015 5:00:22 PM	R25028
Toluene	11000	200		µg/L	200	3/24/2015 5:00:22 PM	R25028
Ethylbenzene	930	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Methyl tert-butyl ether (MTBE)	48	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,4-Trimethylbenzene	510	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,3,5-Trimethylbenzene	110	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Naphthalene	93	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
1-Methylnaphthalene	ND	80		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Methylnaphthalene	ND	80		µg/L	20	3/24/2015 5:36:43 PM	R25028
Acetone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromodichloromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromoform	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromomethane	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Butanone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Carbon disulfide	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Carbon Tetrachloride	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chloroethane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chloroform	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chloromethane	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Chlorotoluene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
4-Chlorotoluene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
cis-1,2-DCE	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
cis-1,3-Dichloropropene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Dibromochloromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Dibromomethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,3-Dichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,4-Dichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Dichlorodifluoromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1-Dichloroethane	48	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1-Dichloroethene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dichloropropane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,3-Dichloropropane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
2,2-Dichloropropane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:16:00 AM
Lab ID: 1503834-003
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Hexachlorobutadiene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Hexanone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Isopropylbenzene	33	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
4-Isopropyltoluene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
4-Methyl-2-pentanone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Methylene Chloride	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
n-Butylbenzene	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
n-Propylbenzene	94	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
sec-Butylbenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Styrene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
tert-Butylbenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Tetrachloroethene (PCE)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
trans-1,2-DCE	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
trans-1,3-Dichloropropene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,3-Trichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,4-Trichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,1-Trichloroethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,2-Trichloroethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Trichloroethene (TCE)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Trichlorofluoromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,3-Trichloropropane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Vinyl chloride	45	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Xylenes, Total	3700	300		µg/L	200	3/24/2015 5:00:22 PM	R25028
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028
Surr: 4-Bromofluorobenzene	89.6	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028
Surr: Dibromofluoromethane	99.3	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028
Surr: Toluene-d8	92.8	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:40:00 AM
Lab ID: 1503834-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	32	1.0		mg/L	1	3/19/2015 8:40:37 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 8:40:37 PM	18212
Surr: DNOP	109	76.5-150		%REC	1	3/19/2015 8:40:37 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	80	10		mg/L	200	3/24/2015 5:12:21 PM	R25029
Surr: BFB	90.1	80-120		%REC	200	3/24/2015 5:12:21 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	12	0.10	*	mg/L	50	3/26/2015 3:38:48 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:54:04 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:54:04 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:54:04 PM	R25072
Iron	49	1.0	*	mg/L	50	3/26/2015 3:38:48 PM	R25095
Manganese	17	0.10	*	mg/L	50	3/26/2015 3:38:48 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:54:04 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:54:04 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	22	0.20	*	mg/L	100	3/31/2015 5:44:29 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:07:46 PM	18338
Chromium	0.036	0.0060		mg/L	1	3/26/2015 6:07:46 PM	18338
Copper	0.095	0.0060		mg/L	1	3/31/2015 5:42:37 PM	18338
Iron	100	4.0	*	mg/L	200	4/1/2015 5:38:49 PM	18338
Manganese	27	0.20	*	mg/L	100	3/31/2015 5:44:29 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:07:46 PM	18338
Zinc	0.14	0.010		mg/L	1	3/31/2015 5:42:37 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	ND	0.0050		mg/L	5	4/2/2015 5:22:51 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:10:48 PM	R25250
Selenium	0.0068	0.0050		mg/L	5	4/2/2015 5:22:51 PM	R25250
Uranium	ND	0.0010		mg/L	1	4/2/2015 4:10:48 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.019	0.010	*	mg/L	10	3/27/2015 5:05:28 PM	18338
Lead	0.20	0.010	*	mg/L	10	3/27/2015 5:05:28 PM	18338
Selenium	ND	0.010		mg/L	10	3/27/2015 5:05:28 PM	18338
Uranium	0.019	0.010		mg/L	10	3/27/2015 5:05:28 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:13:18 AM	18458

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:40:00 AM
Lab ID: 1503834-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Aniline	67	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4-Dimethylphenol	110	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:40:00 AM
Lab ID: 1503834-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Methylnaphthalene	88	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Methylphenol	530	50		µg/L	5	3/25/2015 11:10:32 AM	18250
3+4-Methylphenol	630	50		µg/L	5	3/25/2015 11:10:32 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Naphthalene	170	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Phenol	420	50		µg/L	5	3/25/2015 11:10:32 AM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Surr: 2-Fluorophenol	50.6	17.6-104		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: Phenol-d5	73.6	17.7-89.9		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: 2,4,6-Tribromophenol	109	16.3-122		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: Nitrobenzene-d5	88.9	45.3-117		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: 2-Fluorobiphenyl	159	43-113	S	%REC	1	3/24/2015 6:33:44 PM	18250
Surr: 4-Terphenyl-d14	86.7	47.6-122		%REC	1	3/24/2015 6:33:44 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:40:00 AM
Lab ID: 1503834-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	11000	500		µg/L	500	3/24/2015 6:31:40 PM	R25028
Toluene	21000	500		µg/L	500	3/24/2015 6:31:40 PM	R25028
Ethylbenzene	1600	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,4-Trimethylbenzene	960	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,3,5-Trimethylbenzene	240	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Naphthalene	200	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
1-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 6:59:13 PM	R25028
Acetone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromodichloromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromoform	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromomethane	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Butanone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Carbon disulfide	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Carbon Tetrachloride	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chloroethane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chloroform	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chloromethane	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Chlorotoluene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
4-Chlorotoluene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
cis-1,2-DCE	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Dibromochloromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Dibromomethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,3-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,4-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Dichlorodifluoromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1-Dichloroethane	78	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1-Dichloroethene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dichloropropane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,3-Dichloropropane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
2,2-Dichloropropane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 11:40:00 AM
Lab ID: 1503834-004
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Hexachlorobutadiene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Hexanone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Isopropylbenzene	51	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
4-Isopropyltoluene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
4-Methyl-2-pentanone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Methylene Chloride	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
n-Butylbenzene	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
n-Propylbenzene	140	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
sec-Butylbenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Styrene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
tert-Butylbenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
trans-1,2-DCE	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,1-Trichloroethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,2-Trichloroethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Trichloroethene (TCE)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Trichlorofluoromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,3-Trichloropropane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Vinyl chloride	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Xylenes, Total	6800	75		µg/L	50	3/24/2015 6:59:13 PM	R25028
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028
Surr: Dibromofluoromethane	94.6	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028
Surr: Toluene-d8	90.5	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:30:00 PM
Lab ID: 1503834-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/19/2015 9:02:06 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 9:02:06 PM	18212
Surr: DNOP	103	76.5-150		%REC	1	3/19/2015 9:02:06 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	3.3	0.50		mg/L	10	3/24/2015 5:41:35 PM	R25029
Surr: BFB	95.3	80-120		%REC	10	3/24/2015 5:41:35 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.19	0.0020		mg/L	1	3/25/2015 10:04:21 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:04:21 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:04:21 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:04:21 PM	R25072
Iron	1.4	0.10	*	mg/L	5	3/26/2015 3:40:30 PM	R25095
Manganese	2.3	0.010	*	mg/L	5	3/26/2015 3:40:30 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 10:04:21 PM	R25072
Zinc	0.039	0.010		mg/L	1	3/25/2015 10:04:21 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.22	0.0020		mg/L	1	3/31/2015 5:46:28 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:09:49 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:09:49 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 5:46:28 PM	18338
Iron	2.0	0.10	*	mg/L	5	3/31/2015 5:48:24 PM	18338
Manganese	2.4	0.010	*	mg/L	5	3/31/2015 5:48:24 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:09:49 PM	18338
Zinc	ND	0.010		mg/L	1	3/31/2015 5:46:28 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	ND	0.0050		mg/L	5	4/2/2015 5:36:40 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:27:45 PM	R25250
Selenium	ND	0.010		mg/L	10	4/4/2015 7:25:48 PM	R25304
Uranium	0.012	0.0010		mg/L	1	4/2/2015 4:27:45 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0029	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
Lead	0.0015	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
Selenium	0.0053	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
Uranium	0.014	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:15:01 AM	18458

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:30:00 PM
Lab ID: 1503834-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:30:00 PM
Lab ID: 1503834-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1-Methylnaphthalene	27	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Naphthalene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Surr: 2-Fluorophenol	68.4	17.6-104		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: Phenol-d5	67.8	17.7-89.9		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: 2,4,6-Tribromophenol	100	16.3-122		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: Nitrobenzene-d5	91.0	45.3-117		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: 2-Fluorobiphenyl	91.1	43-113		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: 4-Terphenyl-d14	84.8	47.6-122		%REC	1	3/24/2015 7:01:59 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:30:00 PM
Lab ID: 1503834-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	490	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Toluene	13	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Ethylbenzene	80	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Methyl tert-butyl ether (MTBE)	500	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,4-Trimethylbenzene	18	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Naphthalene	11	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
1-Methylnaphthalene	30	20		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Methylnaphthalene	ND	20		µg/L	5	3/24/2015 7:53:51 PM	R25028
Acetone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromodichloromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromoform	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromomethane	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Butanone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Carbon disulfide	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Carbon Tetrachloride	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chloroethane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chloroform	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chloromethane	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Chlorotoluene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
4-Chlorotoluene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
cis-1,2-DCE	36	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Dibromochloromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Dibromomethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1-Dichloroethane	34	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1-Dichloroethene	74	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dichloropropane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,3-Dichloropropane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
2,2-Dichloropropane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:30:00 PM
Lab ID: 1503834-005
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Hexachlorobutadiene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Hexanone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Isopropylbenzene	7.4	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
4-Isopropyltoluene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
4-Methyl-2-pentanone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Methylene Chloride	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
n-Butylbenzene	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
n-Propylbenzene	13	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
sec-Butylbenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Styrene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
tert-Butylbenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Tetrachloroethene (PCE)	7.1	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
trans-1,2-DCE	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,1-Trichloroethane	130	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Trichloroethene (TCE)	9.0	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Trichlorofluoromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,3-Trichloropropane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Vinyl chloride	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Xylenes, Total	18	7.5		µg/L	5	3/24/2015 7:53:51 PM	R25028
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028
Surr: Dibromofluoromethane	98.2	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028
Surr: Toluene-d8	91.7	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:55:00 PM
Lab ID: 1503834-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	2.9	1.0		mg/L	1	3/19/2015 9:23:33 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 9:23:33 PM	18212
Surr: DNOP	95.8	76.5-150		%REC	1	3/19/2015 9:23:33 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	61	10		mg/L	200	3/24/2015 8:07:43 PM	R25029
Surr: BFB	89.1	80-120		%REC	200	3/24/2015 8:07:43 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.94	0.010		mg/L	5	3/26/2015 3:42:08 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:06:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:06:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:06:02 PM	R25072
Iron	5.6	0.20	*	mg/L	10	3/26/2015 3:53:50 PM	R25095
Manganese	1.2	0.010	*	mg/L	5	3/26/2015 3:42:08 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 10:06:02 PM	R25072
Zinc	0.024	0.010		mg/L	1	3/25/2015 10:06:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.0	0.020		mg/L	10	3/31/2015 5:58:00 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:21:57 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:21:57 PM	18338
Copper	0.023	0.0060		mg/L	1	3/31/2015 5:56:10 PM	18338
Iron	7.2	0.20	*	mg/L	10	3/31/2015 5:58:00 PM	18338
Manganese	1.3	0.020	*	mg/L	10	3/31/2015 5:58:00 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:21:57 PM	18338
Zinc	0.035	0.010		mg/L	1	3/31/2015 5:56:10 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	ND	0.010		mg/L	10	4/2/2015 5:39:43 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:30:52 PM	R25250
Selenium	ND	0.020		mg/L	20	4/2/2015 5:42:46 PM	R25250
Uranium	ND	0.0010		mg/L	1	4/2/2015 4:30:52 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/27/2015 5:08:39 PM	18338
Lead	ND	0.010		mg/L	10	3/27/2015 5:08:39 PM	18338
Selenium	ND	0.020		mg/L	20	3/31/2015 5:23:43 PM	18338
Uranium	ND	0.010		mg/L	10	3/27/2015 5:08:39 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:16:45 AM	18458

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:55:00 PM
Lab ID: 1503834-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Aniline	20	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4-Dimethylphenol	190	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:55:00 PM
Lab ID: 1503834-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1-Methylnaphthalene	45	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Methylnaphthalene	53	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Methylphenol	150	10		µg/L	1	3/24/2015 7:30:13 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Naphthalene	150	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Phenol	31	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Surr: 2-Fluorophenol	65.3	17.6-104		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: Phenol-d5	49.4	17.7-89.9		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: 2,4,6-Tribromophenol	104	16.3-122		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: Nitrobenzene-d5	88.3	45.3-117		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: 2-Fluorobiphenyl	89.6	43-113		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: 4-Terphenyl-d14	79.3	47.6-122		%REC	1	3/24/2015 7:30:13 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:55:00 PM
Lab ID: 1503834-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	19000	500		µg/L	500	3/24/2015 8:21:12 PM	R25028
Toluene	450	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Ethylbenzene	1400	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Methyl tert-butyl ether (MTBE)	1600	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,4-Trimethylbenzene	940	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,3,5-Trimethylbenzene	310	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Naphthalene	200	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
1-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 8:48:39 PM	R25028
Acetone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromodichloromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromoform	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromomethane	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Butanone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Carbon disulfide	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Carbon Tetrachloride	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chloroethane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chloroform	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chloromethane	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Chlorotoluene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
4-Chlorotoluene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
cis-1,2-DCE	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Dibromochloromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Dibromomethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,3-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,4-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Dichlorodifluoromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1-Dichloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1-Dichloroethene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dichloropropane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,3-Dichloropropane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
2,2-Dichloropropane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-16
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 1:55:00 PM
Lab ID: 1503834-006
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Hexachlorobutadiene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Hexanone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Isopropylbenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
4-Isopropyltoluene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
4-Methyl-2-pentanone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Methylene Chloride	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
n-Butylbenzene	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
n-Propylbenzene	110	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
sec-Butylbenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Styrene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
tert-Butylbenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
trans-1,2-DCE	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,1-Trichloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,2-Trichloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Trichloroethene (TCE)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Trichlorofluoromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,3-Trichloropropane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Vinyl chloride	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Xylenes, Total	5400	75		µg/L	50	3/24/2015 8:48:39 PM	R25028
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028
Surr: Dibromofluoromethane	91.0	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028
Surr: Toluene-d8	92.8	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:20:00 PM
Lab ID: 1503834-007
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	4.5	1.0		mg/L	1	3/19/2015 9:44:54 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 9:44:54 PM	18212
Surr: DNOP	94.8	76.5-150		%REC	1	3/19/2015 9:44:54 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	37	2.5		mg/L	50	3/24/2015 8:37:00 PM	R25029
Surr: BFB	90.2	80-120		%REC	50	3/24/2015 8:37:00 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.0	0.020		mg/L	10	3/26/2015 3:55:31 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:11:34 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:11:34 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:11:34 PM	R25072
Iron	8.6	0.20	*	mg/L	10	3/26/2015 3:55:31 PM	R25095
Manganese	3.1	0.020	*	mg/L	10	3/26/2015 3:55:31 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 10:11:34 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:11:34 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.0	0.010	*	mg/L	5	3/31/2015 6:01:38 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:23:54 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:23:54 PM	18338
Copper	0.016	0.0060		mg/L	1	3/31/2015 5:59:57 PM	18338
Iron	11	0.40	*	mg/L	20	3/31/2015 6:03:37 PM	18338
Manganese	3.2	0.010	*	mg/L	5	3/31/2015 6:01:38 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:23:54 PM	18338
Zinc	0.030	0.010		mg/L	1	3/31/2015 5:59:57 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	0.022	0.010	*	mg/L	10	4/2/2015 5:45:50 PM	R25250
Lead	0.0013	0.0010		mg/L	1	4/2/2015 4:33:55 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:45:50 PM	R25250
Uranium	0.0088	0.0010		mg/L	1	4/2/2015 4:33:55 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.025	0.0010	*	mg/L	1	3/27/2015 4:35:33 PM	18338
Lead	0.0066	0.0010		mg/L	1	3/27/2015 4:35:33 PM	18338
Selenium	0.0046	0.0010		mg/L	1	3/27/2015 4:35:33 PM	18338
Uranium	0.011	0.0010		mg/L	1	3/27/2015 4:35:33 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:18:31 AM	18458

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:20:00 PM
Lab ID: 1503834-007
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4-Dimethylphenol	320	20		µg/L	2	3/25/2015 11:38:22 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:20:00 PM
Lab ID: 1503834-007
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1-Methylnaphthalene	45	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Methylnaphthalene	37	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Methylphenol	210	10		µg/L	1	3/24/2015 7:58:27 PM	18250
3+4-Methylphenol	360	20		µg/L	2	3/25/2015 11:38:22 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Naphthalene	130	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Phenol	210	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Pyridine	16	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Surr: 2-Fluorophenol	50.8	17.6-104		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: Phenol-d5	44.7	17.7-89.9		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: 2,4,6-Tribromophenol	95.7	16.3-122		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: Nitrobenzene-d5	77.3	45.3-117		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: 2-Fluorobiphenyl	84.7	43-113		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: 4-Terphenyl-d14	70.0	47.6-122		%REC	1	3/24/2015 7:58:27 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:20:00 PM
Lab ID: 1503834-007
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	7000	200		µg/L	200	3/25/2015 12:32:59 PM	R25068
Toluene	2300	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Ethylbenzene	89	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,4-Trimethylbenzene	1300	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,3,5-Trimethylbenzene	390	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Naphthalene	210	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
1-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 9:43:30 PM	R25028
Acetone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromodichloromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromoform	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromomethane	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Butanone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Carbon disulfide	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Carbon Tetrachloride	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chloroethane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chloroform	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chloromethane	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Chlorotoluene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
4-Chlorotoluene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
cis-1,2-DCE	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Dibromochloromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Dibromomethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,3-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,4-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Dichlorodifluoromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1-Dichloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1-Dichloroethene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dichloropropane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,3-Dichloropropane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
2,2-Dichloropropane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-20
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:20:00 PM
Lab ID: 1503834-007
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Hexachlorobutadiene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Hexanone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Isopropylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
4-Isopropyltoluene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
4-Methyl-2-pentanone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Methylene Chloride	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
n-Butylbenzene	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
n-Propylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
sec-Butylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Styrene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
tert-Butylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
trans-1,2-DCE	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,1-Trichloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,2-Trichloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Trichloroethene (TCE)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Trichlorofluoromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,3-Trichloropropane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Vinyl chloride	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Xylenes, Total	9600	300		µg/L	200	3/25/2015 12:32:59 PM	R25068
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028
Surr: Dibromofluoromethane	94.8	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028
Surr: Toluene-d8	93.1	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:26:00 PM
Lab ID: 1503834-008
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	3.8	1.0		mg/L	1	3/19/2015 10:06:27 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 10:06:27 PM	18212
Surr: DNOP	84.3	76.5-150		%REC	1	3/19/2015 10:06:27 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	16	1.0		mg/L	20	3/24/2015 9:06:15 PM	R25029
Surr: BFB	92.3	80-120		%REC	20	3/24/2015 9:06:15 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.9	0.010		mg/L	5	3/30/2015 8:11:31 PM	R25178
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:13:14 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:13:14 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:13:14 PM	R25072
Iron	18	0.40	*	mg/L	20	3/30/2015 8:13:21 PM	R25178
Manganese	3.1	0.010	*	mg/L	5	3/30/2015 8:11:31 PM	R25178
Silver	ND	0.0050		mg/L	1	3/25/2015 10:13:14 PM	R25072
Zinc	0.074	0.010		mg/L	1	3/25/2015 10:13:14 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	4.9	0.020	*	mg/L	10	3/31/2015 6:07:38 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:25:51 PM	18338
Chromium	0.029	0.0060		mg/L	1	3/26/2015 6:25:51 PM	18338
Copper	0.10	0.0060		mg/L	1	3/31/2015 6:05:38 PM	18338
Iron	55	2.0	*	mg/L	100	3/31/2015 6:09:17 PM	18338
Manganese	6.4	0.020	*	mg/L	10	3/31/2015 6:07:38 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:25:51 PM	18338
Zinc	0.44	0.010		mg/L	1	3/31/2015 6:05:38 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	0.011	0.010	*	mg/L	10	4/2/2015 5:48:53 PM	R25250
Lead	0.012	0.0010		mg/L	1	4/2/2015 4:36:59 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:48:53 PM	R25250
Uranium	0.0012	0.0010		mg/L	1	4/2/2015 4:36:59 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.020	0.010	*	mg/L	10	3/27/2015 5:11:50 PM	18338
Lead	0.079	0.010	*	mg/L	10	3/27/2015 5:11:50 PM	18338
Selenium	ND	0.010		mg/L	10	3/27/2015 5:11:50 PM	18338
Uranium	0.0066	0.0010		mg/L	1	3/27/2015 4:38:45 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:23:58 AM	18458

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:26:00 PM
Lab ID: 1503834-008
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:26:00 PM
Lab ID: 1503834-008
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
3+4-Methylphenol	69	10		µg/L	1	3/24/2015 8:26:41 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Naphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Phenol	38	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Surr: 2-Fluorophenol	32.4	17.6-104		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: Phenol-d5	25.4	17.7-89.9		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: 2,4,6-Tribromophenol	47.4	16.3-122		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: Nitrobenzene-d5	53.7	45.3-117		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: 2-Fluorobiphenyl	44.2	43-113		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: 4-Terphenyl-d14	38.8	47.6-122	S	%REC	1	3/24/2015 8:26:41 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:26:00 PM
Lab ID: 1503834-008
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	3700	50		µg/L	50	3/24/2015 10:10:47 PM	R25028
Toluene	260	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Ethylbenzene	13	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Methyl tert-butyl ether (MTBE)	630	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,4-Trimethylbenzene	110	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,3,5-Trimethylbenzene	51	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Naphthalene	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
1-Methylnaphthalene	ND	40		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Methylnaphthalene	ND	40		µg/L	10	3/25/2015 1:00:27 PM	R25068
Acetone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromodichloromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromoform	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromomethane	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Butanone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Carbon disulfide	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Carbon Tetrachloride	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chloroethane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chloroform	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chloromethane	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Chlorotoluene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
4-Chlorotoluene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
cis-1,2-DCE	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Dibromochloromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Dibromomethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,3-Dichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,4-Dichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Dichlorodifluoromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1-Dichloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1-Dichloroethene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dichloropropane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,3-Dichloropropane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
2,2-Dichloropropane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-21
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:26:00 PM
Lab ID: 1503834-008
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Hexachlorobutadiene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Hexanone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Isopropylbenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
4-Isopropyltoluene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
4-Methyl-2-pentanone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Methylene Chloride	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
n-Butylbenzene	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
n-Propylbenzene	16	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
sec-Butylbenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Styrene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
tert-Butylbenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
trans-1,2-DCE	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,1-Trichloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,2-Trichloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Trichloroethene (TCE)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Trichlorofluoromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,3-Trichloropropane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Vinyl chloride	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Xylenes, Total	270	15		µg/L	10	3/25/2015 1:00:27 PM	R25068
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068
Surr: 4-Bromofluorobenzene	90.7	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068
Surr: Dibromofluoromethane	95.6	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068
Surr: Toluene-d8	91.3	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:55:00 PM
Lab ID: 1503834-009
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	6.2	1.0		mg/L	1	3/19/2015 10:27:57 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 10:27:57 PM	18212
Surr: DNOP	103	76.5-150		%REC	1	3/19/2015 10:27:57 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.21	0.050		mg/L	1	3/25/2015 12:32:38 PM	R25071
Surr: BFB	194	80-120	S	%REC	1	3/25/2015 12:32:38 PM	R25071
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	21	0.10	*	mg/L	50	3/30/2015 8:16:58 PM	R25178
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:15:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:15:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:15:02 PM	R25072
Iron	31	1.0	*	mg/L	50	3/30/2015 8:16:58 PM	R25178
Manganese	7.0	0.020	*	mg/L	10	3/30/2015 8:15:18 PM	R25178
Silver	ND	0.0050		mg/L	1	3/25/2015 10:15:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:15:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	35	0.20	*	mg/L	100	3/31/2015 6:20:29 PM	18338
Cadmium	ND	0.010		mg/L	5	3/31/2015 6:11:10 PM	18338
Chromium	ND	0.030		mg/L	5	3/31/2015 6:11:10 PM	18338
Copper	ND	0.030		mg/L	5	3/31/2015 6:11:10 PM	18338
Iron	50	2.0	*	mg/L	100	3/31/2015 6:20:29 PM	18338
Manganese	8.6	0.020	*	mg/L	10	3/31/2015 6:12:54 PM	18338
Silver	ND	0.025		mg/L	5	3/31/2015 6:11:10 PM	18338
Zinc	0.059	0.050		mg/L	5	3/31/2015 6:11:10 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	ND	0.010		mg/L	10	4/2/2015 5:51:56 PM	R25250
Lead	ND	0.0050		mg/L	5	4/2/2015 4:46:08 PM	R25250
Selenium	0.011	0.010		mg/L	10	4/2/2015 5:51:56 PM	R25250
Uranium	0.0099	0.0050		mg/L	5	4/2/2015 4:46:08 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/27/2015 5:15:02 PM	18338
Lead	0.034	0.010	*	mg/L	10	3/27/2015 5:15:02 PM	18338
Selenium	ND	0.010		mg/L	10	3/27/2015 5:15:02 PM	18338
Uranium	0.012	0.010		mg/L	10	3/27/2015 5:15:02 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	0.00021	0.00020		mg/L	1	4/2/2015 10:25:44 AM	18458

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:55:00 PM
Lab ID: 1503834-009
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Carbazole	11	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250

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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 Not In Range
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:55:00 PM
Lab ID: 1503834-009
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1-Methylnaphthalene	56	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Naphthalene	20	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Surr: 2-Fluorophenol	86.4	17.6-104		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: Phenol-d5	71.3	17.7-89.9		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: 2,4,6-Tribromophenol	105	16.3-122		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: Nitrobenzene-d5	86.5	45.3-117		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: 2-Fluorobiphenyl	95.8	43-113		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: 4-Terphenyl-d14	79.3	47.6-122		%REC	1	3/24/2015 10:13:35 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:55:00 PM
Lab ID: 1503834-009
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	16	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Toluene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Ethylbenzene	39	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,4-Trimethylbenzene	64	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Naphthalene	44	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1-Methylnaphthalene	91	8.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Methylnaphthalene	13	8.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Acetone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromodichloromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromoform	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromomethane	ND	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Butanone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Carbon disulfide	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Carbon Tetrachloride	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chloroethane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chloroform	2.2	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chloromethane	ND	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Chlorotoluene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
4-Chlorotoluene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
cis-1,2-DCE	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Dibromochloromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Dibromomethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1-Dichloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1-Dichloroethene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dichloropropane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,3-Dichloropropane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2,2-Dichloropropane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-39
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 2:55:00 PM
Lab ID: 1503834-009
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Hexachlorobutadiene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Hexanone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Isopropylbenzene	11	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
4-Isopropyltoluene	5.2	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
4-Methyl-2-pentanone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Methylene Chloride	6.3	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
n-Butylbenzene	ND	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
n-Propylbenzene	14	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
sec-Butylbenzene	5.7	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Styrene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
tert-Butylbenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
trans-1,2-DCE	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Trichlorofluoromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Vinyl chloride	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Xylenes, Total	ND	3.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068
Surr: 4-Bromofluorobenzene	100	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068
Surr: Dibromofluoromethane	98.5	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068
Surr: Toluene-d8	91.0	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068

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Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 3:15:00 PM
Lab ID: 1503834-010
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/19/2015 10:49:26 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 10:49:26 PM	18212
Surr: DNOP	95.4	76.5-150		%REC	1	3/19/2015 10:49:26 PM	18212
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.33	0.050		mg/L	1	3/24/2015 10:04:43 PM	R25029
Surr: BFB	92.2	80-120		%REC	1	3/24/2015 10:04:43 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.14	0.0020		mg/L	1	3/25/2015 10:16:51 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:16:51 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:16:51 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:16:51 PM	R25072
Iron	0.24	0.020		mg/L	1	3/25/2015 10:16:51 PM	R25072
Manganese	3.1	0.010	*	mg/L	5	3/30/2015 8:19:05 PM	R25178
Silver	ND	0.0050		mg/L	1	3/25/2015 10:16:51 PM	R25072
Zinc	0.096	0.010		mg/L	1	3/25/2015 10:16:51 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.34	0.0020		mg/L	1	3/31/2015 6:22:26 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:29:51 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:29:51 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 6:22:26 PM	18338
Iron	3.5	0.20	*	mg/L	10	3/31/2015 6:34:14 PM	18338
Manganese	3.1	0.010	*	mg/L	5	3/31/2015 6:27:54 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:29:51 PM	18338
Zinc	0.014	0.010		mg/L	1	3/31/2015 6:22:26 PM	18338
EPA 200.8: DISSOLVED METALS						Analyst:	**TES**
Arsenic	ND	0.010		mg/L	10	4/2/2015 5:54:59 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:52:15 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:54:59 PM	R25250
Uranium	0.025	0.0010		mg/L	1	4/2/2015 4:52:15 PM	R25250
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0031	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
Lead	0.0060	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
Selenium	0.0058	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
Uranium	0.029	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:29:03 AM	18458

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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 3:15:00 PM
Lab ID: 1503834-010
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 3:15:00 PM
Lab ID: 1503834-010
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Naphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Surr: 2-Fluorophenol	85.9	17.6-104		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: Phenol-d5	74.9	17.7-89.9		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: 2,4,6-Tribromophenol	106	16.3-122		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: Nitrobenzene-d5	98.1	45.3-117		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: 2-Fluorobiphenyl	109	43-113		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: 4-Terphenyl-d14	84.1	47.6-122		%REC	1	3/24/2015 10:41:32 PM	18250
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: MKTF-38
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Collection Date: 3/16/2015 3:15:00 PM
Lab ID: 1503834-010
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	9.2	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Toluene	18	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Ethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Methyl tert-butyl ether (MTBE)	6.0	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Naphthalene	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Acetone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromodichloromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromoform	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromomethane	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Butanone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Carbon disulfide	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Carbon Tetrachloride	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chloroethane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chloroform	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chloromethane	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
4-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
cis-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Dibromochloromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Dibromomethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1-Dichloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1-Dichloroethene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,3-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2,2-Dichloropropane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-38
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015 3:15:00 PM
Lab ID: 1503834-010
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Hexachlorobutadiene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Hexanone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Isopropylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
4-Isopropyltoluene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
4-Methyl-2-pentanone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Methylene Chloride	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
n-Butylbenzene	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
n-Propylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
sec-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Styrene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
tert-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
trans-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Trichlorofluoromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Vinyl chloride	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Xylenes, Total	ND	1.5		µg/L	1	3/26/2015 2:01:20 AM	R25068
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068
Surr: Toluene-d8	92.0	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/16/2015
Lab ID: 1503834-011
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Carbazole	15	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250

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Hall Environmental Analysis Laboratory, Inc.

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Lab ID: 1503834-011
Matrix: AQUEOUS
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1-Methylnaphthalene	70	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Naphthalene	27	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Surr: 2-Fluorophenol	12.0	17.6-104	S	%REC	1	3/24/2015 11:09:29 PM	18250
Surr: Phenol-d5	36.7	17.7-89.9		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: 2,4,6-Tribromophenol	19.4	16.3-122		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: Nitrobenzene-d5	87.8	45.3-117		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: 2-Fluorobiphenyl	85.1	43-113		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: 4-Terphenyl-d14	74.8	47.6-122		%REC	1	3/24/2015 11:09:29 PM	18250

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503834-012
Matrix: TRIP BLANK
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/24/2015 10:33:56 PM	R25029
Surr: BFB	84.6	80-120		%REC	1	3/24/2015 10:33:56 PM	R25029
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Toluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Ethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Naphthalene	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Acetone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromodichloromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromoform	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromomethane	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Butanone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Carbon disulfide	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Carbon Tetrachloride	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chloroethane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chloroform	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chloromethane	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
4-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
cis-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Dibromochloromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Dibromomethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1-Dichloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1-Dichloroethene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503834-012
Matrix: TRIP BLANK
Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,3-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2,2-Dichloropropane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Hexachlorobutadiene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Hexanone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Isopropylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
4-Isopropyltoluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
4-Methyl-2-pentanone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Methylene Chloride	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
n-Butylbenzene	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
n-Propylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
sec-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Styrene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
tert-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
trans-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Trichlorofluoromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Vinyl chloride	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Xylenes, Total	ND	1.5		µg/L	1	3/26/2015 2:28:48 AM	R25068
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068
Surr: 4-Bromofluorobenzene	91.4	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068
Surr: Toluene-d8	87.1	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068

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

Qualifiers:

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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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739897** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.2	85	115			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **1503834-006EMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-16** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740062** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.51	0.0020	0.5000	0	102	70	130			
Chromium	0.49	0.0060	0.5000	0	98.8	70	130			
Copper	0.58	0.0060	0.5000	0	116	70	130			
Silver	0.083	0.0050	0.1000	0	82.7	70	130			
Zinc	0.51	0.010	0.5000	0.02399	96.9	70	130			

Sample ID **1503834-006EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-16** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740063** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	101	70	130	0.806	20	
Chromium	0.49	0.0060	0.5000	0	98.3	70	130	0.536	20	
Copper	0.57	0.0060	0.5000	0	114	70	130	1.62	20	
Silver	0.086	0.0050	0.1000	0	86.0	70	130	3.85	20	
Zinc	0.50	0.010	0.5000	0.02399	95.8	70	130	1.10	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740730** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Sample ID **1503834-006EMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-16** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740808** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	3.4	0.010	2.500	0.9406	98.9	70	130			
Manganese	3.6	0.010	2.500	1.191	98.0	70	130			

Sample ID **1503834-006EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-16** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740809** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	3.5	0.010	2.500	0.9406	102	70	130	2.09	20	
Manganese	3.7	0.010	2.500	1.191	98.9	70	130	0.621	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25178** RunNo: **25178**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **744023** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25178** RunNo: **25178**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **744024** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.5	85	115			
Iron	0.48	0.020	0.5000	0	95.4	85	115			
Manganese	0.47	0.0020	0.5000	0	93.5	85	115			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18338** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18338** RunNo: **25098**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **740873** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-18338** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18338** RunNo: **25098**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **740874** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.49	0.0060	0.5000	0	98.0	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.6	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.48	0.010	0.5000	0	95.1	85	115			

Sample ID **1503834-010FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-38** Batch ID: **18338** RunNo: **25098**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **741712** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.48	0.0020	0.5000	0	96.6	70	130			
Chromium	0.46	0.0060	0.5000	0.004630	91.7	70	130			
Silver	0.11	0.0050	0.1000	0	108	70	130			

Sample ID **1503834-010FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-38** Batch ID: **18338** RunNo: **25098**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **741713** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.48	0.0020	0.5000	0	96.3	70	130	0.334	20	
Chromium	0.47	0.0060	0.5000	0.004630	92.6	70	130	0.982	20	
Silver	0.11	0.0050	0.1000	0	108	70	130	0.527	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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503834-010FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-38** Batch ID: **18338** RunNo: **25211**
Prep Date: **3/25/2015** Analysis Date: **3/31/2015** SeqNo: **745308** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.84	0.0020	0.5000	0.3383	100	70	130			
Copper	0.56	0.0060	0.5000	0	112	70	130			
Zinc	0.50	0.010	0.5000	0.01402	96.6	70	130			

Sample ID **1503834-010FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-38** Batch ID: **18338** RunNo: **25211**
Prep Date: **3/25/2015** Analysis Date: **3/31/2015** SeqNo: **745309** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.84	0.0020	0.5000	0.3383	100	70	130	0.103	20	
Copper	0.56	0.0060	0.5000	0	113	70	130	0.342	20	
Zinc	0.50	0.010	0.5000	0.01402	97.5	70	130	0.931	20	

Sample ID **1503834-010FMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-38** Batch ID: **18338** RunNo: **25211**
Prep Date: **3/25/2015** Analysis Date: **3/31/2015** SeqNo: **745311** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.6	0.010	0.5000	3.120	99.8	70	130			

Sample ID **1503834-010FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-38** Batch ID: **18338** RunNo: **25211**
Prep Date: **3/25/2015** Analysis Date: **3/31/2015** SeqNo: **745312** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.7	0.010	0.5000	3.120	109	70	130	1.29	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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.7	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.8	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.0	85	115			
Lead	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743937** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743937** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743938** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **1503834-009EMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-39** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747250** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.13	0.0050	0.1250	0.001311	101	70	130			
Uranium	0.15	0.0050	0.1250	0.009857	113	70	130			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747261** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.8	85	115			
Lead	0.025	0.0010	0.02500	0	98.3	85	115			
Selenium	0.023	0.0010	0.02500	0	92.6	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25250** RunNo: **25250**
Prep Date: Analysis Date: **4/2/2015** SeqNo: **747262** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R25250**	RunNo: **25250**
Prep Date:	Analysis Date: **4/2/2015**	SeqNo: **747262** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R25304**	RunNo: **25304**
Prep Date:	Analysis Date: **4/4/2015**	SeqNo: **748545** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.025	0.0010	0.02500	0	99.5	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R25304**	RunNo: **25304**
Prep Date:	Analysis Date: **4/4/2015**	SeqNo: **748546** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LLLCS-18338** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **18338** RunNo: **25145**
Prep Date: **3/25/2015** Analysis Date: **3/27/2015** SeqNo: **742934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.027	0.0010	0.02500	0	107	85	115			

Sample ID **MB-18338** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **18338** RunNo: **25145**
Prep Date: **3/25/2015** Analysis Date: **3/27/2015** SeqNo: **742936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**MB-18458**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**18458**	RunNo:	**25243**
Prep Date:	**4/1/2015**	Analysis Date:	**4/2/2015**	SeqNo:	**746453** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-18458**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**18458**	RunNo:	**25243**
Prep Date:	**4/1/2015**	Analysis Date:	**4/2/2015**	SeqNo:	**746454** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18212**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW**	Batch ID: **18212**	RunNo: **24910**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734683** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		101	76.5	150			

Sample ID **LCS-18212**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW**	Batch ID: **18212**	RunNo: **24910**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734684** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	60.1	156			
Surr: DNOP	0.54		0.5000		107	76.5	150			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ML RBC** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R25029** RunNo: **25029**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738548** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.0	80	120			

Sample ID **2.5UG GRO LCSB** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R25029** RunNo: **25029**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738549** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	100	80	120			
Surr: BFB	19		20.00		93.3	80	120			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R25071** RunNo: **25071**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739716** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.6	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R25071** RunNo: **25071**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739717** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.4	80	120			
Surr: BFB	20		20.00		102	80	120			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R25028**	RunNo: **25028**			
Prep Date:	Analysis Date: **3/24/2015**	SeqNo: **738128**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R25028** RunNo: **25028**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738128** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	8.9		10.00		89.4	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R25028** RunNo: **25028**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738130** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	22	1.0	20.00	0	112	70	130			
Chlorobenzene	22	1.0	20.00	0	110	70	130			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R25028** RunNo: **25028**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738130** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	97.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID **1503834-002a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-4** Batch ID: **R25028** RunNo: **25028**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738581** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	420	10	200.0	218.8	98.5	70	130			
Toluene	230	10	200.0	6.550	113	70	130			
Chlorobenzene	210	10	200.0	0	107	70	130			
1,1-Dichloroethene	270	10	200.0	31.69	117	70	130			
Trichloroethene (TCE)	200	10	200.0	0	99.0	70	130			
Surr: 1,2-Dichloroethane-d4	95		100.0		95.3	70	130			
Surr: 4-Bromofluorobenzene	95		100.0		95.3	70	130			
Surr: Dibromofluoromethane	90		100.0		90.0	70	130			
Surr: Toluene-d8	96		100.0		96.4	70	130			

Sample ID **1503834-002a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-4** Batch ID: **R25028** RunNo: **25028**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738582** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	420	10	200.0	218.8	103	70	130	2.16	20	
Toluene	230	10	200.0	6.550	113	70	130	0.164	20	
Chlorobenzene	220	10	200.0	0	108	70	130	0.972	20	
1,1-Dichloroethene	270	10	200.0	31.69	118	70	130	0.549	20	
Trichloroethene (TCE)	200	10	200.0	0	101	70	130	1.78	20	
Surr: 1,2-Dichloroethane-d4	100		100.0		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	94		100.0		93.8	70	130	0	0	
Surr: Dibromofluoromethane	96		100.0		95.7	70	130	0	0	
Surr: Toluene-d8	98		100.0		97.7	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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R25068**	RunNo: **25068**			
Prep Date:	Analysis Date: **3/25/2015**	SeqNo: **739872**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R25068** RunNo: **25068**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739872** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.2	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.9	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID **100nglcs200anxlcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R25068** RunNo: **25068**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739876** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.7	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100nglcs200anxlcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R25068** RunNo: **25068**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739876** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	88.1	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18250**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18250**	RunNo: **25041**			
Prep Date: **3/20/2015**	Analysis Date: **3/24/2015**	SeqNo: **738605**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18250**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18250**	RunNo: **25041**			
Prep Date: **3/20/2015**	Analysis Date: **3/24/2015**	SeqNo: **738605**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	160		200.0		79.2	17.6	104			
Surr: Phenol-d5	160		200.0		79.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		87.6	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.5	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113			
Surr: 4-Terphenyl-d14	85		100.0		85.0	47.6	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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcs-18250** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18250** RunNo: **25041**
Prep Date: **3/20/2015** Analysis Date: **3/24/2015** SeqNo: **738606** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.3	47.8	99.7			
4-Chloro-3-methylphenol	170	10	200.0	0	85.2	58.1	103			
2-Chlorophenol	150	10	200.0	0	77.2	49.5	96.8			
1,4-Dichlorobenzene	75	10	100.0	0	75.0	40.4	89.4			
2,4-Dinitrotoluene	64	10	100.0	0	63.9	38.6	91.3			
N-Nitrosodi-n-propylamine	83	10	100.0	0	82.6	53.9	95.6			
4-Nitrophenol	150	10	200.0	0	73.9	26.4	108			
Pentachlorophenol	140	20	200.0	0	69.6	36.5	86.6			
Phenol	170	10	200.0	0	84.0	29.3	108			
Pyrene	80	10	100.0	0	79.7	45.7	100			
1,2,4-Trichlorobenzene	82	10	100.0	0	82.1	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		76.8	17.6	104			
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		85.3	16.3	122			
Surr: Nitrobenzene-d5	77		100.0		77.3	45.3	117			
Surr: 2-Fluorobiphenyl	77		100.0		77.1	43	113			
Surr: 4-Terphenyl-d14	86		100.0		85.7	47.6	122			

Sample ID **mb-18336** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **18336** RunNo: **25103**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **741043** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		78.7	17.6	104			
Surr: Phenol-d5	170		200.0		83.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	210		200.0		106	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.4	45.3	117			
Surr: 2-Fluorobiphenyl	76		100.0		76.0	43	113			
Surr: 4-Terphenyl-d14	91		100.0		91.4	47.6	122			

Sample ID **lcs-18336** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18336** RunNo: **25103**
Prep Date: **3/25/2015** Analysis Date: **3/26/2015** SeqNo: **741044** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		82.3	17.6	104			
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		100	16.3	122			
Surr: Nitrobenzene-d5	75		100.0		75.4	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		79.7	43	113			

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 Not In Range
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#: **1503834**
20-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**lcs-18336**	SampType:	**LCS**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSW**	Batch ID:	**18336**	RunNo:	**25103**
Prep Date:	**3/25/2015**	Analysis Date:	**3/26/2015**	SeqNo:	**741044** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	89		100.0		88.8	47.6	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1503834** RcptNo: **1**

Received by/date: CS 03/18/15

Logged By: **Ashley Gallegos** **3/18/2015 11:00:00 AM**

Completed By: **Ashley Gallegos** **3/18/2015 5:48:31 PM**

Reviewed By: 03/19/15

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 14 (<2 or >12 unless noted)

Adjusted? 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	1.2	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503834	8260+MTBE	8015B (DRO/GRO/MRO)	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)										Air Bubbles (Y or N)
3/16/2015	700	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	-001	X														
3/16/2015	1050	AQUEOUS	MKTF-4	MISC	MISC	-002	X	X	X	X	X										
3/16/2015	1116	AQUEOUS	MKTF-11	MISC	MISC	-003	X	X	X	X	X										
3/16/2015	1140	AQUEOUS	MKTF-10	MISC	MISC	-004	X	X	X	X	X										
3/16/2015	1330	AQUEOUS	MKTF-9	MISC	MISC	-005	X	X	X	X	X										
3/16/2015	1355	AQUEOUS	MKTF-16	MISC	MISC	-006	X	X	X	X	X										
3/16/2015	1420	AQUEOUS	MKTF-20	MISC	MISC	-007	X	X	X	X	X										
3/16/2015	1426	AQUEOUS	MKTF-21	MISC	MISC	-008	X	X	X	X	X										
3/16/2015	1455	AQUEOUS	MKTF-39	MISC	MISC	-009	X	X	X	X	X										
3/16/2015	1515	AQUEOUS	MKTF-38	MISC	MISC	-010	X	X	X	X	X										
3/16/2015		AQUEOUS	BLIND DUPLICATE	1L Amber	None	-011			X												
3/16/2015		AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-012	X														

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/18/15	1100	[signature]	Celina Sena	03/18/15	1100
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 06, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1ST QTR (MKTF) OrderNo.: 1503570

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/13/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:00:00 PM
Lab ID: 1503570-001
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Toluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Naphthalene	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Acetone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromoform	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromomethane	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Butanone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Carbon disulfide	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chloroethane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chloroform	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chloromethane	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:00:00 PM
Lab ID: 1503570-001
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Hexanone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Styrene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Xylenes, Total	ND	1.5		µg/L	1	3/16/2015 11:18:24 PM	R24857
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857
Surr: Dibromofluoromethane	94.3	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857
Surr: Toluene-d8	93.9	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:30:00 PM
Lab ID: 1503570-002
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/16/2015 7:08:15 PM	18160
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 7:08:15 PM	18160
Surr: DNOP	123	76.5-150		%REC	1	3/16/2015 7:08:15 PM	18160
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/17/2015 4:39:05 PM	R24888
Surr: BFB	84.0	80-120		%REC	1	3/17/2015 4:39:05 PM	R24888
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.12	0.0020		mg/L	1	3/25/2015 9:41:05 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:41:05 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:41:05 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:41:05 PM	R25072
Iron	0.21	0.020		mg/L	1	3/25/2015 9:41:05 PM	R25072
Manganese	0.013	0.0020		mg/L	1	3/26/2015 3:26:46 PM	R25095
Silver	ND	0.0050		mg/L	1	3/30/2015 6:34:41 PM	R25178
Zinc	ND	0.010		mg/L	1	3/25/2015 9:41:05 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.25	0.0020		mg/L	1	3/25/2015 8:03:42 PM	18308
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:03:42 PM	18308
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:03:42 PM	18308
Copper	ND	0.0060		mg/L	1	3/25/2015 8:03:42 PM	18308
Iron	5.2	0.20	*	mg/L	10	3/26/2015 2:43:35 PM	18308
Manganese	0.15	0.0020	*	mg/L	1	3/25/2015 8:03:42 PM	18308
Silver	ND	0.0050		mg/L	1	3/25/2015 8:03:42 PM	18308
Zinc	0.059	0.010		mg/L	1	3/25/2015 8:03:42 PM	18308
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 4:01:17 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 8:47:31 PM	R25105
Selenium	ND	0.050		mg/L	50	3/30/2015 5:08:37 PM	R25155
Uranium	0.025	0.0010		mg/L	1	3/26/2015 8:47:31 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 6:32:35 PM	18308
Lead	0.0045	0.0010		mg/L	1	3/25/2015 4:44:00 PM	18308
Selenium	0.013	0.010		mg/L	10	3/25/2015 6:32:35 PM	18308
Uranium	0.028	0.0010		mg/L	1	3/25/2015 4:44:00 PM	18308
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 1:51:58 PM	18285

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:30:00 PM
Lab ID: 1503570-002
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:30:00 PM
Lab ID: 1503570-002
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Naphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Surr: 2-Fluorophenol	75.1	17.6-104		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: Phenol-d5	69.0	17.7-89.9		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: 2,4,6-Tribromophenol	105	16.3-122		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: Nitrobenzene-d5	85.9	45.3-117		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: 2-Fluorobiphenyl	87.7	43-113		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: 4-Terphenyl-d14	126	47.6-122	S	%REC	1	3/18/2015 5:02:43 PM	18139
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:30:00 PM
Lab ID: 1503570-002
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Toluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Naphthalene	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Acetone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromoform	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromomethane	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Butanone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Carbon disulfide	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chloroethane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chloroform	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chloromethane	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-34
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 2:30:00 PM
Lab ID: 1503570-002
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Hexanone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Styrene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Trichloroethene (TCE)	1.2	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Xylenes, Total	ND	1.5		µg/L	1	3/16/2015 11:47:10 PM	R24857
Surr: 1,2-Dichloroethane-d4	85.8	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857
Surr: Dibromofluoromethane	85.6	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857
Surr: Toluene-d8	98.8	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:05:00 PM
Lab ID: 1503570-003
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/16/2015 8:13:06 PM	18160
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 8:13:06 PM	18160
Surr: DNOP	114	76.5-150		%REC	1	3/16/2015 8:13:06 PM	18160
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.80	0.050		mg/L	1	3/17/2015 5:08:17 PM	R24888
Surr: BFB	97.7	80-120		%REC	1	3/17/2015 5:08:17 PM	R24888
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	3/25/2015 9:47:02 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:47:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:47:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:47:02 PM	R25072
Iron	0.57	0.020	*	mg/L	1	3/25/2015 9:47:02 PM	R25072
Manganese	3.0	0.010	*	mg/L	5	3/26/2015 3:32:04 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:47:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:47:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.17	0.0020		mg/L	1	3/25/2015 8:05:23 PM	18308
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:05:23 PM	18308
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:05:23 PM	18308
Copper	ND	0.0060		mg/L	1	3/25/2015 8:05:23 PM	18308
Iron	1.8	0.10	*	mg/L	5	3/26/2015 2:45:13 PM	18308
Manganese	3.1	0.010	*	mg/L	5	3/26/2015 2:45:13 PM	18308
Silver	ND	0.0050		mg/L	1	3/25/2015 8:05:23 PM	18308
Zinc	ND	0.010		mg/L	1	3/25/2015 8:05:23 PM	18308
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0062	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
Lead	ND	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
Selenium	0.0058	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
Uranium	0.021	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0057	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
Lead	0.0017	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
Selenium	0.0023	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
Uranium	0.022	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 1:53:45 PM	18285

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:05:00 PM
Lab ID: 1503570-003
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:05:00 PM
Lab ID: 1503570-003
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Naphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Surr: 2-Fluorophenol	72.4	17.6-104		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: Phenol-d5	66.3	17.7-89.9		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: 2,4,6-Tribromophenol	97.6	16.3-122		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: Nitrobenzene-d5	84.2	45.3-117		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: 2-Fluorobiphenyl	92.7	43-113		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: 4-Terphenyl-d14	135	47.6-122	S	%REC	1	3/18/2015 5:30:47 PM	18139
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:05:00 PM
Lab ID: 1503570-003
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	2.8	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Toluene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Ethylbenzene	5.9	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Methyl tert-butyl ether (MTBE)	590	5.0		µg/L	5	3/17/2015 1:41:52 AM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Naphthalene	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Acetone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromodichloromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromoform	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromomethane	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Butanone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Carbon disulfide	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Carbon Tetrachloride	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chloroethane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chloroform	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chloromethane	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
4-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
cis-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Dibromochloromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Dibromomethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1-Dichloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1-Dichloroethene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,3-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2,2-Dichloropropane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-17
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:05:00 PM
Lab ID: 1503570-003
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Hexachlorobutadiene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Hexanone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Isopropylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
4-Isopropyltoluene	1.2	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
4-Methyl-2-pentanone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Methylene Chloride	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
n-Butylbenzene	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
n-Propylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
sec-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Styrene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
tert-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
trans-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Trichlorofluoromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Vinyl chloride	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Xylenes, Total	ND	1.5		µg/L	1	3/17/2015 10:57:50 AM	R24886
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886
Surr: 4-Bromofluorobenzene	78.3	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886
Surr: Dibromofluoromethane	93.2	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886
Surr: Toluene-d8	95.7	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:37:00 PM
Lab ID: 1503570-004
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	9.3	1.0		mg/L	1	3/16/2015 8:34:45 PM	18160
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 8:34:45 PM	18160
Surr: DNOP	124	76.5-150		%REC	1	3/16/2015 8:34:45 PM	18160
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	14	1.0		mg/L	20	3/18/2015 1:55:14 PM	R24900
Surr: BFB	77.7	80-120	S	%REC	20	3/18/2015 1:55:14 PM	R24900
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.6	0.020		mg/L	10	3/26/2015 3:33:46 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:48:55 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:48:55 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:48:55 PM	R25072
Iron	9.5	0.20	*	mg/L	10	3/26/2015 3:33:46 PM	R25095
Manganese	3.1	0.020	*	mg/L	10	3/26/2015 3:33:46 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:48:55 PM	R25072
Zinc	0.012	0.010		mg/L	1	3/25/2015 9:48:55 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.7	0.010	*	mg/L	5	3/26/2015 2:46:54 PM	18308
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:14:10 PM	18308
Chromium	0.022	0.0060		mg/L	1	3/25/2015 8:14:10 PM	18308
Copper	0.026	0.0060		mg/L	1	3/25/2015 8:14:10 PM	18308
Iron	33	1.0	*	mg/L	50	3/26/2015 2:48:22 PM	18308
Manganese	4.2	0.010	*	mg/L	5	3/26/2015 2:46:54 PM	18308
Silver	ND	0.0050		mg/L	1	3/25/2015 8:14:10 PM	18308
Zinc	0.078	0.010		mg/L	1	3/25/2015 8:14:10 PM	18308
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.021	0.010	*	mg/L	10	3/30/2015 4:04:20 PM	R25155
Lead	0.0017	0.0010		mg/L	1	3/26/2015 8:53:38 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 5:11:40 PM	R25155
Uranium	ND	0.0010		mg/L	1	3/26/2015 8:53:38 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.017	0.0010	*	mg/L	1	3/25/2015 4:50:23 PM	18308
Lead	0.052	0.010	*	mg/L	10	3/25/2015 6:35:46 PM	18308
Selenium	ND	0.010		mg/L	10	3/25/2015 6:35:46 PM	18308
Uranium	0.0065	0.0010		mg/L	1	3/25/2015 4:50:23 PM	18308
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 1:55:32 PM	18285

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:37:00 PM
Lab ID: 1503570-004
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:37:00 PM
Lab ID: 1503570-004
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1-Methylnaphthalene	170	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Methylnaphthalene	270	50		µg/L	5	3/19/2015 5:06:12 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Naphthalene	340	50		µg/L	5	3/19/2015 5:06:12 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Phenol	15	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Surr: 2-Fluorophenol	65.6	17.6-104		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: Phenol-d5	67.8	17.7-89.9		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: 2,4,6-Tribromophenol	91.7	16.3-122		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: Nitrobenzene-d5	87.1	45.3-117		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: 2-Fluorobiphenyl	89.9	43-113		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: 4-Terphenyl-d14	123	47.6-122	S	%REC	1	3/18/2015 5:58:48 PM	18139
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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Qualifiers:

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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
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:37:00 PM
Lab ID: 1503570-004
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	1400	50		µg/L	50	3/17/2015 3:08:09 AM	R24857
Toluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Ethylbenzene	430	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Methyl tert-butyl ether (MTBE)	9700	50		µg/L	50	3/17/2015 3:08:09 AM	R24857
1,2,4-Trimethylbenzene	390	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,3,5-Trimethylbenzene	47	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Naphthalene	380	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
1-Methylnaphthalene	170	40		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Methylnaphthalene	250	40		µg/L	10	3/17/2015 11:26:28 AM	R24886
Acetone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromodichloromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromoform	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromomethane	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Butanone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Carbon disulfide	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Carbon Tetrachloride	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chloroethane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chloroform	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chloromethane	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Chlorotoluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
4-Chlorotoluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
cis-1,2-DCE	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Dibromochloromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Dibromomethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,3-Dichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,4-Dichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Dichlorodifluoromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1-Dichloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1-Dichloroethene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dichloropropane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,3-Dichloropropane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
2,2-Dichloropropane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-19
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 3:37:00 PM
Lab ID: 1503570-004
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Hexachlorobutadiene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Hexanone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Isopropylbenzene	18	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
4-Isopropyltoluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
4-Methyl-2-pentanone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Methylene Chloride	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
n-Butylbenzene	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
n-Propylbenzene	37	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
sec-Butylbenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Styrene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
tert-Butylbenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
trans-1,2-DCE	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,1-Trichloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,2-Trichloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Trichloroethene (TCE)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Trichlorofluoromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2,3-Trichloropropane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Vinyl chloride	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Xylenes, Total	150	15		µg/L	10	3/17/2015 11:26:28 AM	R24886
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886
Surr: 4-Bromofluorobenzene	81.1	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886
Surr: Dibromofluoromethane	98.5	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886
Surr: Toluene-d8	96.7	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015
Lab ID: 1503570-005
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139

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Qualifiers:

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Collection Date: 3/12/2015
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Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Naphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Surr: 2-Fluorophenol	68.7	17.6-104		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: Phenol-d5	57.8	17.7-89.9		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: 2,4,6-Tribromophenol	96.7	16.3-122		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: Nitrobenzene-d5	75.9	45.3-117		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: 2-Fluorobiphenyl	83.5	43-113		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: 4-Terphenyl-d14	116	47.6-122		%REC	1	3/18/2015 6:26:45 PM	18139

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503570-006
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/17/2015 5:37:26 PM	R24888
Surr: BFB	85.1	80-120		%REC	1	3/17/2015 5:37:26 PM	R24888
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Toluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Ethylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Naphthalene	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Acetone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromodichloromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromoform	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromomethane	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Butanone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Carbon disulfide	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Carbon Tetrachloride	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chloroethane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chloroform	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chloromethane	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
4-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
cis-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Dibromochloromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Dibromomethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1-Dichloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1-Dichloroethene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503570-006
Matrix: AQUEOUS
Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,3-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2,2-Dichloropropane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Hexachlorobutadiene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Hexanone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Isopropylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
4-Isopropyltoluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
4-Methyl-2-pentanone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Methylene Chloride	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
n-Butylbenzene	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
n-Propylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
sec-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Styrene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
tert-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
trans-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Trichlorofluoromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Vinyl chloride	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Xylenes, Total	ND	1.5		µg/L	1	3/17/2015 4:05:40 AM	R24857
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857
Surr: Toluene-d8	98.5	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857

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

Qualifiers:

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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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739897** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.2	85	115			

Qualifiers:

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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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **1503570-002EMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-34** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740039** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.61	0.0020	0.5000	0.1250	96.9	70	130			
Cadmium	0.50	0.0020	0.5000	0	100	70	130			
Chromium	0.49	0.0060	0.5000	0	97.9	70	130			
Copper	0.55	0.0060	0.5000	0	110	70	130			
Iron	0.72	0.020	0.5000	0.2110	103	70	130			
Zinc	0.50	0.010	0.5000	0.009350	98.7	70	130			

Sample ID **1503570-002EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-34** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740040** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.62	0.0020	0.5000	0.1250	98.0	70	130	0.934	20	
Cadmium	0.51	0.0020	0.5000	0	102	70	130	1.41	20	
Chromium	0.50	0.0060	0.5000	0	99.6	70	130	1.70	20	
Copper	0.56	0.0060	0.5000	0	111	70	130	1.20	20	
Iron	0.74	0.020	0.5000	0.2110	105	70	130	1.56	20	
Zinc	0.50	0.010	0.5000	0.009350	98.7	70	130	0.0219	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740730** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Sample ID **1503570-002EMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-34** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740796** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.47	0.0020	0.5000	0.01292	91.9	70	130			

Sample ID **1503570-002EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-34** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740797** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.47	0.0020	0.5000	0.01292	91.6	70	130	0.276	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25178** RunNo: **25178**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **744023** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25178** RunNo: **25178**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **744024** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			

Sample ID **1503570-002EMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-34** Batch ID: **R25178** RunNo: **25178**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **744065** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.088	0.0050	0.1000	0	87.8	70	130			

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**1503570-002EMSD**	SampType:	**MSD**	TestCode:	**EPA Method 200.7: Dissolved Metals**
Client ID:	**MKTF-34**	Batch ID:	**R25178**	RunNo:	**25178**
Prep Date:		Analysis Date:	**3/30/2015**	SeqNo:	**744066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.088	0.0050	0.1000	0	88.0	70	130	0.273	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18308** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18308** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739893** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-18308** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18308** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739894** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.4	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.4	85	115			
Chromium	0.50	0.0060	0.5000	0	99.0	85	115			
Copper	0.50	0.0060	0.5000	0	99.4	85	115			
Iron	0.49	0.020	0.5000	0	97.5	85	115			
Manganese	0.48	0.0020	0.5000	0	96.4	85	115			
Silver	0.11	0.0050	0.1000	0	107	85	115			
Zinc	0.49	0.010	0.5000	0	98.1	85	115			

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741199** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741200** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741201** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741202** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741203** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741203** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741204** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.2	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.0	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**							
Client ID: **PBW**	Batch ID: **R25155**	RunNo: **25155**							
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **743936**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**							
Client ID: **PBW**	Batch ID: **R25155**	RunNo: **25155**							
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **743937**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**							
Client ID: **PBW**	Batch ID: **R25155**	RunNo: **25155**							
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **743938**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**LLLCS-18308**	SampType:	**LCSLL**	TestCode:	**200.8 ICPMS Metals:Total**
Client ID:	**BatchQC**	Batch ID:	**18308**	RunNo:	**25061**
Prep Date:	**3/24/2015**	Analysis Date:	**3/25/2015**	SeqNo:	**740171** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	**MB-18308**	SampType:	**MBLK**	TestCode:	**200.8 ICPMS Metals:Total**
Client ID:	**PBW**	Batch ID:	**18308**	RunNo:	**25061**
Prep Date:	**3/24/2015**	Analysis Date:	**3/25/2015**	SeqNo:	**740172** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**MB-18285**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**18285**	RunNo:	**25035**
Prep Date:	**3/23/2015**	Analysis Date:	**3/24/2015**	SeqNo:	**738243** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-18285**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**18285**	RunNo:	**25035**
Prep Date:	**3/23/2015**	Analysis Date:	**3/24/2015**	SeqNo:	**738244** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	105	80	120			

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18160** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **18160** RunNo: **24843**
Prep Date: **3/16/2015** Analysis Date: **3/16/2015** SeqNo: **732007** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		114	76.5	150			

Sample ID **LCS-18160** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **18160** RunNo: **24843**
Prep Date: **3/16/2015** Analysis Date: **3/16/2015** SeqNo: **732008** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.1	1.0	5.000	0	82.0	60.1	156			
Surr: DNOP	0.44		0.5000		87.9	76.5	150			

Sample ID **1503570-002CMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **MKTF-34** Batch ID: **18160** RunNo: **24843**
Prep Date: **3/16/2015** Analysis Date: **3/16/2015** SeqNo: **732223** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	75.9	164			
Surr: DNOP	0.59		0.5000		119	76.5	150			

Sample ID **1503570-002CMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **MKTF-34** Batch ID: **18160** RunNo: **24843**
Prep Date: **3/16/2015** Analysis Date: **3/16/2015** SeqNo: **732224** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.8	1.0	5.000	0	116	75.9	164	5.37	22.1	
Surr: DNOP	0.64		0.5000		127	76.5	150	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R24888** RunNo: **24888**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733216** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		87.0	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R24888** RunNo: **24888**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733218** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	102	80	120			
Surr: BFB	20		20.00		99.8	80	120			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R24900** RunNo: **24900**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **733904** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		85.7	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R24900** RunNo: **24900**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **733905** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	94.4	80	120			
Surr: BFB	20		20.00		100	80	120			

Sample ID **1503570-004BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-19** Batch ID: **R24900** RunNo: **24900**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **733908** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	1.0	10.00	14.19	97.0	51	131			
Surr: BFB	410		400.0		104	80	120			

Sample ID **1503570-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-19** Batch ID: **R24900** RunNo: **24900**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **733909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503570-004BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-19** Batch ID: **R24900** RunNo: **24900**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **733909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	1.0	10.00	14.19	90.8	51	131	2.60	20	
Surr: BFB	420		400.0		104	80	120	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24857**	RunNo: **24857**			
Prep Date:	Analysis Date: **3/16/2015**	SeqNo: **732125**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24857** RunNo: **24857**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732125** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.8	70	130			
Surr: Toluene-d8	9.6		10.00		96.5	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24857** RunNo: **24857**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	19	1.0	20.00	0	95.4	70	130			
Chlorobenzene	19	1.0	20.00	0	96.6	70	130			

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24857** RunNo: **24857**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	110	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.3		10.00		92.8	70	130			

Sample ID **1503570-002a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-34** Batch ID: **R24857** RunNo: **24857**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **732133** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.08160	102	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	22	1.0	20.00	0.4972	107	70	130			
Trichloroethene (TCE)	17	1.0	20.00	1.211	80.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **1503570-002a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-34** Batch ID: **R24857** RunNo: **24857**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **732134** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.08160	97.4	70	130	4.81	20	
Toluene	19	1.0	20.00	0	95.8	70	130	7.02	20	
Chlorobenzene	19	1.0	20.00	0	94.8	70	130	5.91	20	
1,1-Dichloroethene	20	1.0	20.00	0.4972	99.4	70	130	6.73	20	
Trichloroethene (TCE)	17	1.0	20.00	1.211	80.0	70	130	0.00930	20	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		100	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.0	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24886**	RunNo: **24886**			
Prep Date:	Analysis Date: **3/17/2015**	SeqNo: **733138**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24886** RunNo: **24886**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733138** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24886** RunNo: **24886**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733141** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.6	70	130			
Toluene	19	1.0	20.00	0	92.6	70	130			
Chlorobenzene	19	1.0	20.00	0	95.4	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	75.6	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **LCSW**	Batch ID: **R24886**	RunNo: **24886**			
Prep Date:	Analysis Date: **3/17/2015**	SeqNo: **733141**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	18	1.0	20.00	0	88.6	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.2	70	130			
Surr: Toluene-d8	9.1		10.00		91.2	70	130			

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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18139**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18139**	RunNo: **24913**			
Prep Date: **3/16/2015**	Analysis Date: **3/18/2015**	SeqNo: **734001**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18139**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18139**	RunNo: **24913**			
Prep Date: **3/16/2015**	Analysis Date: **3/18/2015**	SeqNo: **734001**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcs-18139** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734002** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	72.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	74.4	58.1	103			
2-Chlorophenol	130	10	200.0	0	66.8	49.5	96.8			
1,4-Dichlorobenzene	69	10	100.0	0	69.3	40.4	89.4			
2,4-Dinitrotoluene	62	10	100.0	0	61.7	38.6	91.3			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	53.9	95.6			
4-Nitrophenol	130	10	200.0	0	67.2	26.4	108			
Pentachlorophenol	130	20	200.0	0	67.4	36.5	86.6			
Phenol	150	10	200.0	0	73.1	29.3	108			
Pyrene	92	10	100.0	0	92.1	45.7	100			
1,2,4-Trichlorobenzene	77	10	100.0	0	76.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID **lcsd-18139** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734003** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.8	99.7	9.31	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	81.1	58.1	103	8.59	24.4	
2-Chlorophenol	150	10	200.0	0	75.9	49.5	96.8	12.8	28.1	
1,4-Dichlorobenzene	77	10	100.0	0	77.3	40.4	89.4	10.9	31.2	
2,4-Dinitrotoluene	73	10	100.0	0	73.4	38.6	91.3	17.4	44.4	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.2	53.9	95.6	13.0	24.2	
4-Nitrophenol	160	10	200.0	0	77.6	26.4	108	14.3	36.6	
Pentachlorophenol	150	20	200.0	0	76.0	36.5	86.6	12.0	29.5	
Phenol	160	10	200.0	0	80.7	29.3	108	9.97	30	
Pyrene	110	10	100.0	0	109	45.7	100	16.7	31	S
1,2,4-Trichlorobenzene	79	10	100.0	0	79.1	39.3	94.5	3.21	24	
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	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 Not In Range
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#: **1503570**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**lcsd-18139**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**18139**	RunNo:	**24913**
Prep Date:	**3/16/2015**	Analysis Date:	**3/18/2015**	SeqNo:	**734003** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1503570** RcptNo: 1

Received by/date: A.T. 03/13/15

Logged By: **Ashley Gallegos** **3/13/2015 10:40:00 AM** AG

Completed By: **Ashley Gallegos** **3/13/2015 10:57:54 AM** AG

Reviewed By: IO 03/16/15

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted? 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			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: X Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503570	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Air Bubbles (Y or N)
3/12/2015	1400	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	-001	X					
3/12/2015	1430	AQUEOUS	MKTF-34	MISC	MISC	-002	X	X	X	X	X	
3/12/2015	1505	AQUEOUS	MKTF-17	MISC	MISC	-003	X	X	X	X	X	
3/12/2015	1537	AQUEOUS	MKTF-19	MISC	MISC	-004	X	X	X	X	X	
				MISC	MISC							
3/12/2015		AQUEOUS	BLIND DUPLICATE	MISC	MISC	-005			X			
3/12/2015		AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-006	X					

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/13/2015	1040			03/13/15	1040
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.

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

April 06, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1ST QTR (MKTF) OrderNo.: 1503557

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/12/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503557**
Date Reported: **4/6/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 7:00:00 AM
Lab ID: 1503557-001
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Toluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Naphthalene	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Acetone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromoform	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromomethane	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Butanone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Carbon disulfide	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chloroethane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chloroform	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chloromethane	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 7:00:00 AM
Lab ID: 1503557-001
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Hexanone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Styrene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 8:25:51 PM	R24836
Surr: 1,2-Dichloroethane-d4	78.3	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836
Surr: Toluene-d8	93.8	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836

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

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 8:31:00 AM
Lab ID: 1503557-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 8:05:38 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 8:05:38 PM	18123
Surr: DNOP	171	76.5-150	S	%REC	1	3/13/2015 8:05:38 PM	18123
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 9:01:58 PM	R24858
Surr: BFB	85.2	80-120		%REC	1	3/16/2015 9:01:58 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.081	0.0020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:13:27 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:13:27 PM	R25072
Iron	0.20	0.020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Manganese	0.024	0.0020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:13:27 PM	R25072
Zinc	0.013	0.010		mg/L	1	3/25/2015 9:13:27 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.19	0.0020		mg/L	1	3/24/2015 4:34:39 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:34:39 PM	18270
Chromium	0.0075	0.0060		mg/L	1	3/24/2015 4:34:39 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:34:39 PM	18270
Iron	8.4	0.20	*	mg/L	10	3/24/2015 5:08:56 PM	18270
Manganese	0.22	0.0020	*	mg/L	1	3/24/2015 4:34:39 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:34:39 PM	18270
Zinc	0.024	0.010		mg/L	1	3/24/2015 4:34:39 PM	18270
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:38:34 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:49:21 PM	R25105
Selenium	0.059	0.010	*	mg/L	10	3/30/2015 2:38:34 PM	R25155
Uranium	0.034	0.0010	*	mg/L	1	3/26/2015 7:49:21 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 3:46:29 PM	18270
Lead	0.0061	0.0010		mg/L	1	3/24/2015 3:13:37 PM	18270
Selenium	0.059	0.010	*	mg/L	10	3/25/2015 3:46:29 PM	18270
Uranium	0.034	0.0010	*	mg/L	1	3/24/2015 3:13:37 PM	18270
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:51:10 AM	18156

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

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 8:31:00 AM
Lab ID: 1503557-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Aniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 8:31:00 AM
Lab ID: 1503557-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Phenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Surr: 2-Fluorophenol	68.0	17.6-104		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: Phenol-d5	62.6	17.7-89.9		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: 2,4,6-Tribromophenol	92.3	16.3-122		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: Nitrobenzene-d5	73.3	45.3-117		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: 2-Fluorobiphenyl	78.3	43-113		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: 4-Terphenyl-d14	101	47.6-122		%REC	1	3/18/2015 11:25:24 AM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 8:31:00 AM
Lab ID: 1503557-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Toluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dichloroethane (EDC)	1.3	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Naphthalene	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Acetone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromoform	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromomethane	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Butanone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Carbon disulfide	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chloroethane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chloroform	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chloromethane	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1-Dichloroethane	1.8	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1-Dichloroethene	1.6	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-41
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 8:31:00 AM
Lab ID: 1503557-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Hexanone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Styrene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 8:53:10 PM	R24836
Surr: 1,2-Dichloroethane-d4	83.0	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836
Surr: Dibromofluoromethane	98.2	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836
Surr: Toluene-d8	94.8	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:05:00 AM
Lab ID: 1503557-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 9:26:50 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 9:26:50 PM	18123
Surr: DNOP	140	76.5-150		%REC	1	3/13/2015 9:26:50 PM	18123
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.46	0.050		mg/L	1	3/16/2015 9:31:12 PM	R24858
Surr: BFB	90.3	80-120		%REC	1	3/16/2015 9:31:12 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.057	0.0020		mg/L	1	3/25/2015 9:15:33 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:15:33 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:15:33 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:15:33 PM	R25072
Iron	0.18	0.020		mg/L	1	3/25/2015 9:15:33 PM	R25072
Manganese	0.080	0.0020	*	mg/L	1	3/25/2015 9:15:33 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:15:33 PM	R25072
Zinc	0.014	0.010		mg/L	1	3/25/2015 9:15:33 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.085	0.0020		mg/L	1	3/24/2015 4:36:25 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:36:25 PM	18270
Chromium	ND	0.0060		mg/L	1	3/24/2015 4:36:25 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:36:25 PM	18270
Iron	1.6	0.10	*	mg/L	5	3/24/2015 5:10:54 PM	18270
Manganese	0.12	0.0020	*	mg/L	1	3/24/2015 4:36:25 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:36:25 PM	18270
Zinc	ND	0.010		mg/L	1	3/24/2015 4:36:25 PM	18270
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:27:37 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:55:28 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 4:50:14 PM	R25155
Uranium	0.068	0.010	*	mg/L	10	3/30/2015 3:27:37 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 3:49:40 PM	18270
Lead	0.0018	0.0010		mg/L	1	3/24/2015 3:16:48 PM	18270
Selenium	0.010	0.010		mg/L	10	3/25/2015 3:49:40 PM	18270
Uranium	0.067	0.010	*	mg/L	10	3/25/2015 3:49:40 PM	18270
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:52:56 AM	18156

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:05:00 AM
Lab ID: 1503557-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Aniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:05:00 AM
Lab ID: 1503557-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Phenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Surr: 2-Fluorophenol	74.3	17.6-104		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: Phenol-d5	68.8	17.7-89.9		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: 2,4,6-Tribromophenol	103	16.3-122		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: Nitrobenzene-d5	85.7	45.3-117		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: 2-Fluorobiphenyl	93.9	43-113		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: 4-Terphenyl-d14	131	47.6-122	S	%REC	1	3/18/2015 11:53:18 AM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:05:00 AM
Lab ID: 1503557-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Toluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Methyl tert-butyl ether (MTBE)	540	20		µg/L	20	3/13/2015 11:37:15 PM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dichloroethane (EDC)	25	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Naphthalene	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Acetone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromoform	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromomethane	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Butanone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Carbon disulfide	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chloroethane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chloroform	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chloromethane	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
cis-1,2-DCE	1.3	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1-Dichloroethane	19	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1-Dichloroethene	48	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-32
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:05:00 AM
Lab ID: 1503557-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Hexanone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Styrene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,1-Trichloroethane	1.1	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,2-Trichloroethane	1.7	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 12:04:40 AM	R24836
Surr: 1,2-Dichloroethane-d4	86.5	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836
Surr: Dibromofluoromethane	96.6	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836
Surr: Toluene-d8	96.8	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:30:00 AM
Lab ID: 1503557-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 9:53:50 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 9:53:50 PM	18123
Surr: DNOP	137	76.5-150		%REC	1	3/13/2015 9:53:50 PM	18123
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.35	0.050		mg/L	1	3/16/2015 10:00:23 PM	R24858
Surr: BFB	83.1	80-120		%REC	1	3/16/2015 10:00:23 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.061	0.0020		mg/L	1	3/25/2015 9:17:29 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:17:29 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:17:29 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:17:29 PM	R25072
Iron	0.026	0.020		mg/L	1	3/25/2015 9:17:29 PM	R25072
Manganese	0.28	0.0020	*	mg/L	1	3/25/2015 9:17:29 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:17:29 PM	R25072
Zinc	0.017	0.010		mg/L	1	3/25/2015 9:17:29 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.25	0.0020		mg/L	1	3/24/2015 4:38:30 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:38:30 PM	18270
Chromium	0.0062	0.0060		mg/L	1	3/24/2015 4:38:30 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:38:30 PM	18270
Iron	3.7	0.10	*	mg/L	5	3/24/2015 5:12:51 PM	18270
Manganese	0.68	0.0020	*	mg/L	1	3/24/2015 4:38:30 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:38:30 PM	18270
Zinc	0.014	0.010		mg/L	1	3/24/2015 4:38:30 PM	18270
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:30:40 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:58:31 PM	R25105
Selenium	ND	0.010		mg/L	10	3/30/2015 3:30:40 PM	R25155
Uranium	0.045	0.0010	*	mg/L	1	3/26/2015 7:58:31 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/25/2015 3:52:51 PM	18270
Lead	0.0059	0.0010		mg/L	1	3/24/2015 3:20:00 PM	18270
Selenium	0.0041	0.0010		mg/L	1	3/24/2015 3:20:00 PM	18270
Uranium	0.045	0.0010	*	mg/L	1	3/24/2015 3:20:00 PM	18270
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:54:42 AM	18156

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:30:00 AM
Lab ID: 1503557-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:30:00 AM
Lab ID: 1503557-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Phenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Surr: 2-Fluorophenol	79.0	17.6-104		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: Phenol-d5	68.2	17.7-89.9		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: 2,4,6-Tribromophenol	101	16.3-122		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: Nitrobenzene-d5	95.5	45.3-117		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: 2-Fluorobiphenyl	97.9	43-113		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: 4-Terphenyl-d14	126	47.6-122	S	%REC	1	3/18/2015 12:21:13 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:30:00 AM
Lab ID: 1503557-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Toluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Methyl tert-butyl ether (MTBE)	480	20		µg/L	20	3/14/2015 12:32:07 AM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Naphthalene	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Acetone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromoform	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromomethane	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Butanone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Carbon disulfide	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chloroethane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chloroform	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chloromethane	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1-Dichloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1-Dichloroethene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-33
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 9:30:00 AM
Lab ID: 1503557-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Hexanone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Styrene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 12:59:34 AM	R24836
Surr: 1,2-Dichloroethane-d4	82.6	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836
Surr: Dibromofluoromethane	98.1	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836
Surr: Toluene-d8	96.8	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:15:00 AM
Lab ID: 1503557-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	14	1.0		mg/L	1	3/16/2015 5:19:55 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 5:19:55 PM	18123
Surr: DNOP	141	76.5-150		%REC	1	3/16/2015 5:19:55 PM	18123
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	35	1.0		mg/L	20	3/16/2015 10:29:34 PM	R24858
Surr: BFB	108	80-120		%REC	20	3/16/2015 10:29:34 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.61	0.0020		mg/L	1	3/25/2015 9:19:26 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:19:26 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:19:26 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:19:26 PM	R25072
Iron	4.4	0.10	*	mg/L	5	3/26/2015 3:08:41 PM	R25095
Manganese	1.9	0.010	*	mg/L	5	3/26/2015 3:08:41 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:19:26 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:19:26 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.64	0.010		mg/L	5	3/24/2015 5:14:45 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:40:19 PM	18270
Chromium	ND	0.0060		mg/L	1	3/24/2015 4:40:19 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:40:19 PM	18270
Iron	5.2	0.20	*	mg/L	10	3/24/2015 5:20:48 PM	18270
Manganese	1.8	0.010	*	mg/L	5	3/24/2015 5:14:45 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:40:19 PM	18270
Zinc	0.011	0.010		mg/L	1	3/24/2015 4:40:19 PM	18270
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.013	0.010	*	mg/L	10	3/30/2015 3:33:43 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 8:07:45 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 4:53:17 PM	R25155
Uranium	0.0045	0.0010		mg/L	1	3/26/2015 8:07:45 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.013	0.010	*	mg/L	10	3/25/2015 3:56:04 PM	18270
Lead	0.0035	0.0010		mg/L	1	3/24/2015 3:29:37 PM	18270
Selenium	0.010	0.010		mg/L	10	3/25/2015 3:56:04 PM	18270
Uranium	0.0062	0.0010		mg/L	1	3/24/2015 3:29:37 PM	18270
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:00:10 AM	18156

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:15:00 AM
Lab ID: 1503557-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4-Dimethylphenol	94	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:15:00 AM
Lab ID: 1503557-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1-Methylnaphthalene	79	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Methylnaphthalene	82	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Methylphenol	42	10		µg/L	1	3/18/2015 12:49:10 PM	18138
3+4-Methylphenol	63	10		µg/L	1	3/18/2015 12:49:10 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Naphthalene	150	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Phenol	21	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Surr: 2-Fluorophenol	18.8	17.6-104		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: Phenol-d5	45.2	17.7-89.9		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: 2,4,6-Tribromophenol	67.8	16.3-122		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: Nitrobenzene-d5	61.0	45.3-117		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: 2-Fluorobiphenyl	67.9	43-113		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: 4-Terphenyl-d14	80.2	47.6-122		%REC	1	3/18/2015 12:49:10 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:15:00 AM
Lab ID: 1503557-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	3300	100		µg/L	100	3/14/2015 1:26:57 AM	R24836
Toluene	4800	100		µg/L	100	3/14/2015 1:26:57 AM	R24836
Ethylbenzene	600	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Methyl tert-butyl ether (MTBE)	1100	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,4-Trimethylbenzene	1400	100		µg/L	100	3/14/2015 1:26:57 AM	R24836
1,3,5-Trimethylbenzene	380	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Naphthalene	300	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
1-Methylnaphthalene	97	40		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Methylnaphthalene	140	40		µg/L	10	3/14/2015 1:54:11 AM	R24836
Acetone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromodichloromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromoform	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromomethane	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Butanone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Carbon disulfide	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Carbon Tetrachloride	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chloroethane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chloroform	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chloromethane	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Chlorotoluene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
4-Chlorotoluene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
cis-1,2-DCE	55	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Dibromochloromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Dibromomethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,3-Dichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,4-Dichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Dichlorodifluoromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1-Dichloroethane	120	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1-Dichloroethene	53	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dichloropropane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,3-Dichloropropane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
2,2-Dichloropropane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-23
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:15:00 AM
Lab ID: 1503557-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Hexachlorobutadiene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Hexanone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Isopropylbenzene	44	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
4-Isopropyltoluene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
4-Methyl-2-pentanone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Methylene Chloride	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
n-Butylbenzene	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
n-Propylbenzene	93	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
sec-Butylbenzene	10	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Styrene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
tert-Butylbenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
trans-1,2-DCE	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,1-Trichloroethane	49	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,2-Trichloroethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Trichloroethene (TCE)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Trichlorofluoromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,3-Trichloropropane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Vinyl chloride	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Xylenes, Total	8100	150		µg/L	100	3/14/2015 1:26:57 AM	R24836
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836
Surr: Dibromofluoromethane	97.7	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836
Surr: Toluene-d8	91.1	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:50:00 AM
Lab ID: 1503557-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	2.5	1.0		mg/L	1	3/16/2015 5:41:39 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 5:41:39 PM	18123
Surr: DNOP	140	76.5-150		%REC	1	3/16/2015 5:41:39 PM	18123
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	13	0.50		mg/L	10	3/16/2015 10:58:45 PM	R24858
Surr: BFB	97.9	80-120		%REC	10	3/16/2015 10:58:45 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.3	0.020		mg/L	10	3/26/2015 3:10:20 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:21:07 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:21:07 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:21:07 PM	R25072
Iron	7.5	0.20	*	mg/L	10	3/26/2015 3:10:20 PM	R25095
Manganese	2.3	0.020	*	mg/L	10	3/26/2015 3:10:20 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:21:07 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:21:07 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.1	0.010	*	mg/L	5	3/24/2015 5:22:54 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:57:30 PM	18270
Chromium	0.018	0.0060		mg/L	1	3/24/2015 4:57:30 PM	18270
Copper	0.015	0.0060		mg/L	1	3/24/2015 4:57:30 PM	18270
Iron	21	1.0	*	mg/L	50	3/24/2015 5:24:52 PM	18270
Manganese	3.5	0.010	*	mg/L	5	3/24/2015 5:22:54 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:57:30 PM	18270
Zinc	0.038	0.010		mg/L	1	3/24/2015 4:57:30 PM	18270
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0031	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
Lead	0.0016	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
Selenium	0.0067	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
Uranium	0.0032	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 3:59:16 PM	18270
Lead	0.035	0.0010	*	mg/L	1	3/24/2015 3:32:48 PM	18270
Selenium	ND	0.010		mg/L	10	3/25/2015 3:59:16 PM	18270
Uranium	0.0047	0.0010		mg/L	1	3/24/2015 3:32:48 PM	18270
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:01:55 AM	18156

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:50:00 AM
Lab ID: 1503557-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:50:00 AM
Lab ID: 1503557-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1-Methylnaphthalene	66	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Naphthalene	16	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Phenol	14	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Surr: 2-Fluorophenol	64.5	17.6-104		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: Phenol-d5	57.1	17.7-89.9		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: 2,4,6-Tribromophenol	89.5	16.3-122		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: Nitrobenzene-d5	72.2	45.3-117		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: 2-Fluorobiphenyl	84.1	43-113		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: 4-Terphenyl-d14	110	47.6-122		%REC	1	3/18/2015 1:17:17 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:50:00 AM
Lab ID: 1503557-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	2600	200		µg/L	200	3/14/2015 2:49:03 AM	R24836
Toluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Ethylbenzene	250	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Methyl tert-butyl ether (MTBE)	5100	200		µg/L	200	3/14/2015 2:49:03 AM	R24836
1,2,4-Trimethylbenzene	58	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,3,5-Trimethylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Naphthalene	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
1-Methylnaphthalene	99	80		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Methylnaphthalene	ND	80		µg/L	20	3/14/2015 3:16:26 AM	R24836
Acetone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromodichloromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromoform	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromomethane	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Butanone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Carbon disulfide	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Carbon Tetrachloride	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chloroethane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chloroform	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chloromethane	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Chlorotoluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
4-Chlorotoluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
cis-1,2-DCE	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
cis-1,3-Dichloropropene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Dibromochloromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Dibromomethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,3-Dichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,4-Dichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Dichlorodifluoromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1-Dichloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1-Dichloroethene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dichloropropane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,3-Dichloropropane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
2,2-Dichloropropane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-22
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 10:50:00 AM
Lab ID: 1503557-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Hexachlorobutadiene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Hexanone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Isopropylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
4-Isopropyltoluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
4-Methyl-2-pentanone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Methylene Chloride	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
n-Butylbenzene	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
n-Propylbenzene	31	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
sec-Butylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Styrene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
tert-Butylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Tetrachloroethene (PCE)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
trans-1,2-DCE	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
trans-1,3-Dichloropropene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2,3-Trichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2,4-Trichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,1-Trichloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,2-Trichloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Trichloroethene (TCE)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Trichlorofluoromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2,3-Trichloropropane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Vinyl chloride	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Xylenes, Total	ND	30		µg/L	20	3/14/2015 3:16:26 AM	R24836
Surr: 1,2-Dichloroethane-d4	79.8	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836
Surr: Dibromofluoromethane	96.3	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836
Surr: Toluene-d8	93.3	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 11:45:00 AM
Lab ID: 1503557-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 11:14:56 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 11:14:56 PM	18123
Surr: DNOP	179	76.5-150	S	%REC	1	3/13/2015 11:14:56 PM	18123
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 11:27:55 PM	R24858
Surr: BFB	84.7	80-120		%REC	1	3/16/2015 11:27:55 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.070	0.0020		mg/L	1	3/25/2015 9:22:47 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:22:47 PM	R25072
Chromium	0.0072	0.0060		mg/L	1	3/25/2015 9:22:47 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:22:47 PM	R25072
Iron	0.85	0.020	*	mg/L	1	3/25/2015 9:22:47 PM	R25072
Manganese	0.079	0.0020	*	mg/L	1	3/25/2015 9:22:47 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:22:47 PM	R25072
Zinc	0.011	0.010		mg/L	1	3/25/2015 9:22:47 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.22	0.0020		mg/L	1	3/24/2015 4:59:24 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:59:24 PM	18270
Chromium	0.023	0.0060		mg/L	1	3/24/2015 4:59:24 PM	18270
Copper	0.0079	0.0060		mg/L	1	3/24/2015 4:59:24 PM	18270
Iron	16	0.40	*	mg/L	20	3/24/2015 5:32:39 PM	18270
Manganese	0.34	0.0020	*	mg/L	1	3/24/2015 4:59:24 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:59:24 PM	18270
Zinc	0.056	0.010		mg/L	1	3/24/2015 4:59:24 PM	18270
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:36:47 PM	R25155
Lead	0.0031	0.0010		mg/L	1	3/26/2015 8:13:51 PM	R25105
Selenium	0.017	0.0010		mg/L	1	3/26/2015 8:13:51 PM	R25105
Uranium	0.22	0.010	*	mg/L	10	3/30/2015 3:36:47 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 4:08:53 PM	18270
Lead	0.016	0.0010	*	mg/L	1	3/24/2015 3:35:59 PM	18270
Selenium	0.015	0.0010		mg/L	1	3/24/2015 3:35:59 PM	18270
Uranium	0.22	0.010	*	mg/L	10	3/25/2015 4:08:53 PM	18270
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:03:42 AM	18156

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 11:45:00 AM
Lab ID: 1503557-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138

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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 11:45:00 AM
Lab ID: 1503557-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Phenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Surr: 2-Fluorophenol	77.3	17.6-104		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: Phenol-d5	67.1	17.7-89.9		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: 2,4,6-Tribromophenol	95.8	16.3-122		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: Nitrobenzene-d5	81.9	45.3-117		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: 2-Fluorobiphenyl	84.9	43-113		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: 4-Terphenyl-d14	105	47.6-122		%REC	1	3/18/2015 1:45:31 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 11:45:00 AM
Lab ID: 1503557-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Toluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Ethylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Naphthalene	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1-Methylnaphthalene	ND	8.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Methylnaphthalene	ND	8.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Acetone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromodichloromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromoform	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromomethane	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Butanone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Carbon disulfide	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Carbon Tetrachloride	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chloroethane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chloroform	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chloromethane	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Chlorotoluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
4-Chlorotoluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
cis-1,2-DCE	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Dibromochloromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Dibromomethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1-Dichloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1-Dichloroethene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dichloropropane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,3-Dichloropropane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2,2-Dichloropropane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-44
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015 11:45:00 AM
Lab ID: 1503557-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Hexachlorobutadiene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Hexanone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Isopropylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
4-Isopropyltoluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
4-Methyl-2-pentanone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Methylene Chloride	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
n-Butylbenzene	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
n-Propylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
sec-Butylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Styrene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
tert-Butylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
trans-1,2-DCE	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Trichlorofluoromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Vinyl chloride	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Xylenes, Total	ND	3.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Surr: 1,2-Dichloroethane-d4	81.4	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836
Surr: Dibromofluoromethane	101	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836
Surr: Toluene-d8	98.1	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015
Lab ID: 1503557-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/12/2015
Lab ID: 1503557-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1-Methylnaphthalene	87	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Naphthalene	20	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Phenol	16	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Surr: 2-Fluorophenol	69.4	17.6-104		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: Phenol-d5	64.6	17.7-89.9		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: 2,4,6-Tribromophenol	96.8	16.3-122		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: Nitrobenzene-d5	77.6	45.3-117		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: 2-Fluorobiphenyl	86.1	43-113		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: 4-Terphenyl-d14	117	47.6-122		%REC	1	3/18/2015 2:13:54 PM	18139

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503557-009
Matrix: TRIP BLANK
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 11:57:03 PM	R24858
Surr: BFB	83.8	80-120		%REC	1	3/16/2015 11:57:03 PM	R24858
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Toluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Naphthalene	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Acetone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromoform	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromomethane	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Butanone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Carbon disulfide	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chloroethane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chloroform	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chloromethane	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1-Dichloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1-Dichloroethene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503557-009
Matrix: TRIP BLANK
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Hexanone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Styrene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 4:38:36 AM	R24836
Surr: 1,2-Dichloroethane-d4	82.0	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836
Surr: Dibromofluoromethane	97.6	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836
Surr: Toluene-d8	94.0	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Manganese	0.47	0.0020	0.5000	0	94.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739897** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740730** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18270** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738189** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-18270** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738190** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.53	0.0020	0.5000	0	107	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.50	0.0060	0.5000	0	99.2	85	115			
Iron	0.54	0.020	0.5000	0	109	85	115			
Manganese	0.49	0.0020	0.5000	0	97.2	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.50	0.010	0.5000	0	100	85	115			

Sample ID **1503557-005EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-23** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738716** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	105	70	130			
Chromium	0.51	0.0060	0.5000	0.003900	102	70	130			
Copper	0.51	0.0060	0.5000	0	102	70	130			
Silver	0.096	0.0050	0.1000	0	95.9	70	130			
Zinc	0.52	0.010	0.5000	0.01121	101	70	130			

Sample ID **1503557-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-23** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738717** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	105	70	130	0.250	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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503557-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-23** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738717** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.003900	102	70	130	0.278	20	
Copper	0.51	0.0060	0.5000	0	102	70	130	0.263	20	
Silver	0.094	0.0050	0.1000	0	93.9	70	130	2.14	20	
Zinc	0.52	0.010	0.5000	0.01121	101	70	130	0.130	20	

Sample ID **1503557-005EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-23** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738734** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	1.2	0.010	0.5000	0.6360	116	70	130			
Manganese	2.3	0.010	0.5000	1.761	111	70	130			

Sample ID **1503557-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-23** Batch ID: **18270** RunNo: **25031**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738735** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	1.2	0.010	0.5000	0.6360	109	70	130	3.15	20	
Manganese	2.2	0.010	0.5000	1.761	96.5	70	130	3.20	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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503557-002FMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-41** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741182** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.030	0.0010	0.02500	0.0007946	116	70	130			
Uranium	0.065	0.0010	0.02500	0.03422	124	70	130			E

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741199** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741200** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741201** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741202** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741202** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741203** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741204** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.2	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.0	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743937** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743938** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LLLCS-18270** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **18270** RunNo: **25044**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738817** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.3	85	115			
Lead	0.025	0.0010	0.02500	0	98.8	85	115			
Selenium	0.024	0.0010	0.02500	0	97.1	85	115			
Uranium	0.025	0.0010	0.02500	0	99.0	85	115			

Sample ID **MB-18270** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **18270** RunNo: **25044**
Prep Date: **3/23/2015** Analysis Date: **3/24/2015** SeqNo: **738820** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010	-381.8	0	0	0	0			
Lead	ND	0.0010	366.8	0	0	0	0			
Selenium	ND	0.0010	54.17	0	0	0	0			
Uranium	ND	0.0010	58.17	0	0	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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**MB-18156**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**18156**	RunNo:	**24865**
Prep Date:	**3/16/2015**	Analysis Date:	**3/17/2015**	SeqNo:	**732460** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-18156**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**18156**	RunNo:	**24865**
Prep Date:	**3/16/2015**	Analysis Date:	**3/17/2015**	SeqNo:	**732461** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.9	80	120			

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18123** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **18123** RunNo: **24810**
Prep Date: **3/13/2015** Analysis Date: **3/13/2015** SeqNo: **731809** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.5		1.000		146	76.5	150			

Sample ID **1503557-002CMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **MKTF-41** Batch ID: **18123** RunNo: **24810**
Prep Date: **3/13/2015** Analysis Date: **3/13/2015** SeqNo: **731813** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	120	75.9	164	1.08	22.1	
Surr: DNOP	0.66		0.5000		132	76.5	150	0	0	

Sample ID **LCS-18123** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **18123** RunNo: **24848**
Prep Date: **3/13/2015** Analysis Date: **3/16/2015** SeqNo: **731923** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.9	1.0	5.000	0	138	60.1	156			
Surr: DNOP	0.89		0.5000		177	76.5	150			S

Sample ID **1503557-002CMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **MKTF-41** Batch ID: **18123** RunNo: **24843**
Prep Date: **3/13/2015** Analysis Date: **3/16/2015** SeqNo: **732213** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.9	1.0	5.000	0	137	75.9	164			
Surr: DNOP	0.75		0.5000		151	76.5	150			S

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R24858**	RunNo:	**24858**
Prep Date:		Analysis Date:	**3/16/2015**	SeqNo:	**732143** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		87.6	80	120			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R24858**	RunNo:	**24858**
Prep Date:		Analysis Date:	**3/16/2015**	SeqNo:	**732146** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	80	120			
Surr: BFB	19		20.00		96.2	80	120			

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24836**	RunNo: **24836**			
Prep Date:	Analysis Date: **3/13/2015**	SeqNo: **731572**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24836** RunNo: **24836**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731572** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.3		10.00		83.3	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.4	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.9	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID **100nglcs200nganxl** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24836** RunNo: **24836**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731574** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100nglcs200nganxl** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24836** RunNo: **24836**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731574** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	122	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	7.9		10.00		79.1	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID **1503557-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-41** Batch ID: **R24836** RunNo: **24836**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731599** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	97.8	70	130			
1,1-Dichloroethene	22	1.0	20.00	1.629	103	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.1		10.00		81.2	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.4	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18138**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18138**	RunNo: **24891**			
Prep Date: **3/16/2015**	Analysis Date: **3/17/2015**	SeqNo: **733319**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18138**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18138**	RunNo: **24891**			
Prep Date: **3/16/2015**	Analysis Date: **3/17/2015**	SeqNo: **733319**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	150		200.0		75.5	17.6	104			
Surr: Phenol-d5	140		200.0		69.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		86.6	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		70.1	45.3	117			
Surr: 2-Fluorobiphenyl	73		100.0		73.1	43	113			
Surr: 4-Terphenyl-d14	100		100.0		100	47.6	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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcs-18138** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18138** RunNo: **24891**
Prep Date: **3/16/2015** Analysis Date: **3/17/2015** SeqNo: **733321** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	76	10	100.0	0	75.9	47.9	114			
4-Chloro-3-methylphenol	160	10	200.0	0	82.1	51.7	122			
2-Chlorophenol	150	10	200.0	0	74.2	40.7	113			
1,4-Dichlorobenzene	71	10	100.0	0	71.0	39.6	99.9			
2,4-Dinitrotoluene	66	10	100.0	0	66.1	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.3	51.2	111			
4-Nitrophenol	140	10	200.0	0	70.9	15.7	86.9			
Pentachlorophenol	160	20	200.0	0	78.1	21.6	104			
Phenol	150	10	200.0	0	76.4	28.6	71.7			S
Pyrene	110	10	100.0	0	109	54.2	128			
1,2,4-Trichlorobenzene	86	10	100.0	0	86.0	40.9	101			
Surr: 2-Fluorophenol	160		200.0		80.5	17.6	104			
Surr: Phenol-d5	160		200.0		80.5	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122			
Surr: Nitrobenzene-d5	74		100.0		73.7	45.3	117			
Surr: 2-Fluorobiphenyl	82		100.0		82.3	43	113			
Surr: 4-Terphenyl-d14	120		100.0		117	47.6	122			

Sample ID **lcsd-18138** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18138** RunNo: **24891**
Prep Date: **3/16/2015** Analysis Date: **3/17/2015** SeqNo: **733322** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	83.3	47.9	114	9.40	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	82.8	51.7	122	0.910	25.9	
2-Chlorophenol	150	10	200.0	0	74.9	40.7	113	1.01	22.5	
1,4-Dichlorobenzene	77	10	100.0	0	77.0	39.6	99.9	8.14	24.6	
2,4-Dinitrotoluene	79	10	100.0	0	79.4	40.8	113	18.3	25.3	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.4	51.2	111	5.04	23.6	
4-Nitrophenol	170	10	200.0	0	85.9	15.7	86.9	19.1	34.7	
Pentachlorophenol	160	20	200.0	0	80.1	21.6	104	2.49	32.8	
Phenol	160	10	200.0	0	80.2	28.6	71.7	4.75	25.5	S
Pyrene	110	10	100.0	0	108	54.2	128	1.27	31.4	
1,2,4-Trichlorobenzene	90	10	100.0	0	90.5	40.9	101	5.08	25.9	
Surr: 2-Fluorophenol	170		200.0		82.6	17.6	104	0	0	
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	88		100.0		87.9	43	113	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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcsd-18138**	SampType: **LCSD**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **LCSS02**	Batch ID: **18138**	RunNo: **24891**			
Prep Date: **3/16/2015**	Analysis Date: **3/17/2015**	SeqNo: **733322**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		107	47.6	122	0	0	

Sample ID **mb-18139**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18139**	RunNo: **24913**			
Prep Date: **3/16/2015**	Analysis Date: **3/18/2015**	SeqNo: **734001**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								

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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18139**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18139**	RunNo: **24913**			
Prep Date: **3/16/2015**	Analysis Date: **3/18/2015**	SeqNo: **734001**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								

Qualifiers:

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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 Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18139** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734001** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	122			

Sample ID **lcs-18139** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734002** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	72.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	74.4	58.1	103			
2-Chlorophenol	130	10	200.0	0	66.8	49.5	96.8			
1,4-Dichlorobenzene	69	10	100.0	0	69.3	40.4	89.4			
2,4-Dinitrotoluene	62	10	100.0	0	61.7	38.6	91.3			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	53.9	95.6			
4-Nitrophenol	130	10	200.0	0	67.2	26.4	108			
Pentachlorophenol	130	20	200.0	0	67.4	36.5	86.6			
Phenol	150	10	200.0	0	73.1	29.3	108			
Pyrene	92	10	100.0	0	92.1	45.7	100			
1,2,4-Trichlorobenzene	77	10	100.0	0	76.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID **lcsd-18139** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734003** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.8	99.7	9.31	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	81.1	58.1	103	8.59	24.4	
2-Chlorophenol	150	10	200.0	0	75.9	49.5	96.8	12.8	28.1	
1,4-Dichlorobenzene	77	10	100.0	0	77.3	40.4	89.4	10.9	31.2	
2,4-Dinitrotoluene	73	10	100.0	0	73.4	38.6	91.3	17.4	44.4	

Qualifiers:

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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 Not In Range
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#: **1503557**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcsd-18139** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734003** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.2	53.9	95.6	13.0	24.2	
4-Nitrophenol	160	10	200.0	0	77.6	26.4	108	14.3	36.6	
Pentachlorophenol	150	20	200.0	0	76.0	36.5	86.6	12.0	29.5	
Phenol	160	10	200.0	0	80.7	29.3	108	9.97	30	
Pyrene	110	10	100.0	0	109	45.7	100	16.7	31	S
1,2,4-Trichlorobenzene	79	10	100.0	0	79.1	39.3	94.5	3.21	24	
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	0	0	
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	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
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1503557** RcptNo: 1

Received by/date: 03/12/15
Logged By: **Lindsay Mangin** **3/12/2015 4:00:00 PM**
Completed By: **Lindsay Mangin** **3/13/2015 7:59:52 AM**
Reviewed By: 03/13/15

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted? 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	3.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: X Yes ☐ No

Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503557	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)										Air Bubbles (Y or N)
3/12/2015	700	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	-001	X														
3/12/2015	831	AQUEOUS	MKTF-41	MISC	MISC	-002	X	X	X	X	X										
3/12/2015	905	AQUEOUS	MKTF-32	MISC	MISC	-003	X	X	X	X	X										
3/12/2015	930	AQUEOUS	MKTF-33	MISC	MISC	-004	X	X	X	X	X										
3/12/2015	1015	AQUEOUS	MKTF-23	MISC	MISC	-005	X	X	X	X	X										
3/12/2015	1050	AQUEOUS	MKTF-22	MISC	MISC	-006	X	X	X	X	X										
3/12/2015	1145	AQUEOUS	MKTF-44	MISC	MISC	-007	X	X	X	X	X										
3/12/2015		AQUEOUS	BLIND DUPLICATE	MISC	MISC	-008			X												
3/12/2015		AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-009	X	X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/12/2015	1315			3-12-15	1315
3-12-15	400			03/12/15	1600

Remarks:

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.

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

April 06, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1ST QTR (MKTF) OrderNo.: 1503556

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 3/12/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503556**
Date Reported: **4/6/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 7:00:00 AM
Lab ID: 1503556-001
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 7:00:00 AM
Lab ID: 1503556-001
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 2:37:15 PM	R24833
Surr: 1,2-Dichloroethane-d4	85.4	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833
Surr: Dibromofluoromethane	87.7	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833
Surr: Toluene-d8	102	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:25:00 AM
Lab ID: 1503556-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 3:15:46 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 3:15:46 AM	18122
Surr: DNOP	156	76.5-150	S	%REC	1	3/14/2015 3:15:46 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 5:48:28 PM	R24831
Surr: BFB	86.0	80-120		%REC	1	3/13/2015 5:48:28 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.086	0.0020		mg/L	1	3/25/2015 8:23:58 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:23:58 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:23:58 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:23:58 PM	R25072
Iron	0.15	0.020		mg/L	1	3/25/2015 8:23:58 PM	R25072
Manganese	0.10	0.0020	*	mg/L	1	3/25/2015 8:23:58 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:23:58 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:23:58 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	3/25/2015 7:12:02 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:12:02 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:12:02 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:12:02 PM	18307
Iron	3.3	0.10	*	mg/L	5	3/26/2015 1:59:45 PM	18307
Manganese	0.27	0.0020	*	mg/L	1	3/25/2015 7:12:02 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:12:02 PM	18307
Zinc	0.014	0.010		mg/L	1	3/25/2015 7:12:02 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 1:46:29 PM	R25155
Lead	ND	0.010		mg/L	10	3/30/2015 1:46:29 PM	R25155
Selenium	0.014	0.010		mg/L	10	3/30/2015 1:46:29 PM	R25155
Uranium	0.075	0.010	*	mg/L	10	3/30/2015 1:46:29 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 5:54:16 PM	18307
Lead	ND	0.010		mg/L	10	3/25/2015 5:54:16 PM	18307
Selenium	ND	0.010		mg/L	10	3/25/2015 5:54:16 PM	18307
Uranium	0.071	0.010	*	mg/L	10	3/25/2015 5:54:16 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:49:06 PM	18286

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

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:25:00 AM
Lab ID: 1503556-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138

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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
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Lab ID: 1503556-002
Matrix: AQUEOUS
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Surr: 2-Fluorophenol	49.9	17.6-104		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: Phenol-d5	61.6	17.7-89.9		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: 2,4,6-Tribromophenol	68.9	16.3-122		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: Nitrobenzene-d5	73.8	45.3-117		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: 2-Fluorobiphenyl	81.7	43-113		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: 4-Terphenyl-d14	119	47.6-122		%REC	1	3/17/2015 4:23:32 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:25:00 AM
Lab ID: 1503556-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Methyl tert-butyl ether (MTBE)	8.9	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1-Dichloroethane	1.6	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-27
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:25:00 AM
Lab ID: 1503556-002
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 3:06:00 PM	R24833
Surr: 1,2-Dichloroethane-d4	84.2	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833
Surr: Dibromofluoromethane	79.9	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833
Surr: Toluene-d8	91.6	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:55:00 AM
Lab ID: 1503556-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 4:37:22 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 4:37:22 AM	18122
Surr: DNOP	139	76.5-150		%REC	1	3/14/2015 4:37:22 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 8:14:25 PM	R24831
Surr: BFB	88.0	80-120		%REC	1	3/13/2015 8:14:25 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.090	0.0020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:30:29 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:30:29 PM	R25072
Iron	0.075	0.020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Manganese	0.0057	0.0020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:30:29 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:30:29 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.14	0.0020		mg/L	1	3/25/2015 7:13:54 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:13:54 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:13:54 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:13:54 PM	18307
Iron	2.5	0.10	*	mg/L	5	3/26/2015 2:01:30 PM	18307
Manganese	0.097	0.0020	*	mg/L	1	3/25/2015 7:13:54 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:13:54 PM	18307
Zinc	0.014	0.010		mg/L	1	3/25/2015 7:13:54 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 1:55:43 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:00:25 PM	R25105
Selenium	ND	0.050		mg/L	50	3/30/2015 2:53:53 PM	R25155
Uranium	0.17	0.010	*	mg/L	10	3/30/2015 1:55:43 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 5:57:28 PM	18307
Lead	0.0028	0.0010		mg/L	1	3/25/2015 2:58:37 PM	18307
Selenium	0.013	0.010		mg/L	10	3/25/2015 5:57:28 PM	18307
Uranium	0.17	0.010	*	mg/L	10	3/25/2015 5:57:28 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:50:50 PM	18286

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:55:00 AM
Lab ID: 1503556-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:55:00 AM
Lab ID: 1503556-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Surr: 2-Fluorophenol	75.1	17.6-104		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: Phenol-d5	66.8	17.7-89.9		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: 2,4,6-Tribromophenol	109	16.3-122		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: Nitrobenzene-d5	83.4	45.3-117		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: 2-Fluorobiphenyl	94.3	43-113		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: 4-Terphenyl-d14	125	47.6-122	S	%REC	1	3/17/2015 4:51:32 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:55:00 AM
Lab ID: 1503556-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-28
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 8:55:00 AM
Lab ID: 1503556-003
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 4:32:14 PM	R24833
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833
Surr: Dibromofluoromethane	90.7	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833
Surr: Toluene-d8	104	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:25:00 AM
Lab ID: 1503556-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 5:04:25 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 5:04:25 AM	18122
Surr: DNOP	147	76.5-150		%REC	1	3/14/2015 5:04:25 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.053	0.050		mg/L	1	3/13/2015 8:43:34 PM	R24831
Surr: BFB	88.4	80-120		%REC	1	3/13/2015 8:43:34 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.036	0.0020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:32:23 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:32:23 PM	R25072
Iron	0.19	0.020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Manganese	0.018	0.0020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:32:23 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:32:23 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.29	0.0020		mg/L	1	3/25/2015 7:15:34 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:15:34 PM	18307
Chromium	0.0072	0.0060		mg/L	1	3/25/2015 7:15:34 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:15:34 PM	18307
Iron	8.6	0.20	*	mg/L	10	3/26/2015 2:03:10 PM	18307
Manganese	0.64	0.0020	*	mg/L	1	3/25/2015 7:15:34 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:15:34 PM	18307
Zinc	0.021	0.010		mg/L	1	3/25/2015 7:15:34 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 1:58:46 PM	R25155
Lead	ND	0.010		mg/L	10	3/30/2015 1:58:46 PM	R25155
Selenium	0.014	0.010		mg/L	10	3/30/2015 1:58:46 PM	R25155
Uranium	0.041	0.010	*	mg/L	10	3/30/2015 1:58:46 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/25/2015 6:00:39 PM	18307
Lead	0.011	0.0010		mg/L	1	3/25/2015 3:01:48 PM	18307
Selenium	0.0079	0.0050		mg/L	5	3/25/2015 6:00:39 PM	18307
Uranium	0.044	0.0010	*	mg/L	1	3/25/2015 3:01:48 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:52:34 PM	18286

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:25:00 AM
Lab ID: 1503556-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:25:00 AM
Lab ID: 1503556-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Surr: 2-Fluorophenol	38.0	17.6-104		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: Phenol-d5	49.4	17.7-89.9		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: 2,4,6-Tribromophenol	56.9	16.3-122		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: Nitrobenzene-d5	67.6	45.3-117		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: 2-Fluorobiphenyl	68.6	43-113		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: 4-Terphenyl-d14	94.9	47.6-122		%REC	1	3/17/2015 5:19:39 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:25:00 AM
Lab ID: 1503556-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Methyl tert-butyl ether (MTBE)	1.9	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dichloroethane (EDC)	4.0	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
cis-1,2-DCE	4.5	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1-Dichloroethane	81	10		µg/L	10	3/16/2015 11:11:54 AM	R24859
1,1-Dichloroethene	4.0	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-30
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:25:00 AM
Lab ID: 1503556-004
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,1-Trichloroethane	1.9	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Trichloroethene (TCE)	3.6	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 5:00:50 PM	R24833
Surr: 1,2-Dichloroethane-d4	83.4	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833
Surr: Dibromofluoromethane	79.0	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833
Surr: Toluene-d8	100	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:50:00 AM
Lab ID: 1503556-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 5:31:44 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 5:31:44 AM	18122
Surr: DNOP	113	76.5-150		%REC	1	3/14/2015 5:31:44 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 9:12:38 PM	R24831
Surr: BFB	88.4	80-120		%REC	1	3/13/2015 9:12:38 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.031	0.0020		mg/L	1	3/25/2015 8:41:27 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:41:27 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:41:27 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:41:27 PM	R25072
Iron	ND	0.020		mg/L	1	3/25/2015 8:41:27 PM	R25072
Manganese	0.34	0.0020	*	mg/L	1	3/25/2015 8:41:27 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:41:27 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:41:27 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.057	0.0020		mg/L	1	3/25/2015 7:24:35 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:24:35 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:24:35 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:24:35 PM	18307
Iron	0.81	0.10	*	mg/L	5	3/27/2015 3:46:06 PM	18307
Manganese	0.36	0.0020	*	mg/L	1	3/25/2015 7:24:35 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:24:35 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:24:35 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0024	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
Lead	ND	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
Selenium	0.0045	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
Uranium	0.023	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0020	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
Lead	ND	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
Selenium	0.0023	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
Uranium	0.023	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:54:20 PM	18286

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:50:00 AM
Lab ID: 1503556-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138

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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 Not In Range
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:50:00 AM
Lab ID: 1503556-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Surr: 2-Fluorophenol	91.0	17.6-104		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: Phenol-d5	80.2	17.7-89.9		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: 2,4,6-Tribromophenol	107	16.3-122		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: Nitrobenzene-d5	99.7	45.3-117		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: 2-Fluorobiphenyl	103	43-113		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: 4-Terphenyl-d14	131	47.6-122	S	%REC	1	3/17/2015 5:47:45 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:50:00 AM
Lab ID: 1503556-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Methyl tert-butyl ether (MTBE)	17	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-29
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 9:50:00 AM
Lab ID: 1503556-005
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 5:29:35 PM	R24833
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833
Surr: Toluene-d8	97.4	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 10:36:00 AM
Lab ID: 1503556-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 5:58:16 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 5:58:16 AM	18122
Surr: DNOP	164	76.5-150	S	%REC	1	3/14/2015 5:58:16 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2.5	0.25		mg/L	5	3/13/2015 9:41:53 PM	R24831
Surr: BFB	88.9	80-120		%REC	5	3/13/2015 9:41:53 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.17	0.0020		mg/L	1	3/25/2015 8:43:24 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:43:24 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:43:24 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:43:24 PM	R25072
Iron	0.85	0.020	*	mg/L	1	3/25/2015 8:43:24 PM	R25072
Manganese	1.4	0.010	*	mg/L	5	3/26/2015 2:51:39 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:43:24 PM	R25072
Zinc	0.068	0.010		mg/L	1	3/25/2015 8:43:24 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.20	0.0020		mg/L	1	3/25/2015 7:30:15 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:30:15 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:30:15 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:30:15 PM	18307
Iron	3.1	0.10	*	mg/L	5	3/26/2015 2:09:46 PM	18307
Manganese	1.3	0.010	*	mg/L	5	3/26/2015 2:09:46 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:30:15 PM	18307
Zinc	0.012	0.010		mg/L	1	3/25/2015 7:30:15 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:01:50 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:09:34 PM	R25105
Selenium	ND	0.010		mg/L	10	3/30/2015 2:01:50 PM	R25155
Uranium	0.045	0.0010	*	mg/L	1	3/26/2015 7:09:34 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0040	0.0010		mg/L	1	3/25/2015 3:08:11 PM	18307
Lead	0.0029	0.0010		mg/L	1	3/25/2015 3:08:11 PM	18307
Selenium	0.0047	0.0010		mg/L	1	3/25/2015 3:08:11 PM	18307
Uranium	0.045	0.0010	*	mg/L	1	3/25/2015 3:08:11 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:56:05 PM	18286

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 10:36:00 AM
Lab ID: 1503556-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 10:36:00 AM
Lab ID: 1503556-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Phenol	14	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Surr: 2-Fluorophenol	64.0	17.6-104		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: Phenol-d5	55.1	17.7-89.9		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: 2,4,6-Tribromophenol	91.0	16.3-122		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: Nitrobenzene-d5	67.9	45.3-117		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: 2-Fluorobiphenyl	77.5	43-113		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: 4-Terphenyl-d14	106	47.6-122		%REC	1	3/17/2015 6:15:51 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 10:36:00 AM
Lab ID: 1503556-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	800	50		µg/L	50	3/13/2015 5:58:15 PM	R24833
Toluene	7.8	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Ethylbenzene	7.1	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Methyl tert-butyl ether (MTBE)	99	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Naphthalene	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
1-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 6:26:58 PM	R24833
Acetone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromodichloromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromoform	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromomethane	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Butanone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Carbon disulfide	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Carbon Tetrachloride	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chloroethane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chloroform	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chloromethane	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
4-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
cis-1,2-DCE	8.0	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Dibromochloromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Dibromomethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1-Dichloroethane	49	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1-Dichloroethene	9.0	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,3-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
2,2-Dichloropropane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-26
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 10:36:00 AM
Lab ID: 1503556-006
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Hexachlorobutadiene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Hexanone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Isopropylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
4-Isopropyltoluene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
4-Methyl-2-pentanone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Methylene Chloride	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
n-Butylbenzene	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
n-Propylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
sec-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Styrene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
tert-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
trans-1,2-DCE	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Trichlorofluoromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,3-Trichloropropane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Vinyl chloride	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Xylenes, Total	ND	7.5		µg/L	5	3/13/2015 6:26:58 PM	R24833
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833
Surr: Dibromofluoromethane	94.1	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833
Surr: Toluene-d8	103	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 11:56:00 AM
Lab ID: 1503556-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 6:25:03 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 6:25:03 AM	18122
Surr: DNOP	183	76.5-150	S	%REC	1	3/14/2015 6:25:03 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	9.2	0.50		mg/L	10	3/13/2015 10:11:03 PM	R24831
Surr: BFB	102	80-120		%REC	10	3/13/2015 10:11:03 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.26	0.0020		mg/L	1	3/25/2015 8:45:23 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:45:23 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:45:23 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:45:23 PM	R25072
Iron	0.34	0.020	*	mg/L	1	3/25/2015 8:45:23 PM	R25072
Manganese	1.2	0.010	*	mg/L	5	3/26/2015 2:56:42 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:45:23 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:45:23 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.71	0.0020		mg/L	1	3/25/2015 7:31:55 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:31:55 PM	18307
Chromium	0.014	0.0060		mg/L	1	3/25/2015 7:31:55 PM	18307
Copper	0.019	0.0060		mg/L	1	3/25/2015 7:31:55 PM	18307
Iron	12	0.40	*	mg/L	20	3/26/2015 2:11:25 PM	18307
Manganese	2.2	0.040	*	mg/L	20	3/26/2015 2:11:25 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:31:55 PM	18307
Zinc	0.031	0.010		mg/L	1	3/25/2015 7:31:55 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/30/2015 2:04:53 PM	R25155
Lead	0.0015	0.0010		mg/L	1	3/26/2015 7:12:38 PM	R25105
Selenium	0.011	0.0050		mg/L	5	3/30/2015 2:04:53 PM	R25155
Uranium	0.043	0.0050	*	mg/L	5	3/30/2015 2:04:53 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 6:03:50 PM	18307
Lead	0.020	0.0010	*	mg/L	1	3/25/2015 3:14:33 PM	18307
Selenium	ND	0.010		mg/L	10	3/25/2015 6:03:50 PM	18307
Uranium	0.046	0.0010	*	mg/L	1	3/25/2015 3:14:33 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:57:50 PM	18286

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: MKTF-24
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 11:56:00 AM
Lab ID: 1503556-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 11:56:00 AM
Lab ID: 1503556-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Surr: 2-Fluorophenol	69.9	17.6-104		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: Phenol-d5	68.5	17.7-89.9		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: 2,4,6-Tribromophenol	92.8	16.3-122		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: Nitrobenzene-d5	79.6	45.3-117		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: 2-Fluorobiphenyl	90.3	43-113		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: 4-Terphenyl-d14	114	47.6-122		%REC	1	3/17/2015 6:43:52 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 11:56:00 AM
Lab ID: 1503556-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	2600	500		µg/L	500	3/16/2015 11:40:33 AM	R24859
Toluene	12	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Ethylbenzene	31	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Methyl tert-butyl ether (MTBE)	170	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dichloroethane (EDC)	7.0	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Naphthalene	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
1-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 7:24:26 PM	R24833
Acetone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromodichloromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromoform	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromomethane	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Butanone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Carbon disulfide	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Carbon Tetrachloride	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chloroethane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chloroform	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chloromethane	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
4-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
cis-1,2-DCE	35	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Dibromochloromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Dibromomethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1-Dichloroethane	100	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1-Dichloroethene	51	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,3-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
2,2-Dichloropropane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-24
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 11:56:00 AM
Lab ID: 1503556-007
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Hexachlorobutadiene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Hexanone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Isopropylbenzene	16	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
4-Isopropyltoluene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
4-Methyl-2-pentanone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Methylene Chloride	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
n-Butylbenzene	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
n-Propylbenzene	24	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
sec-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Styrene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
tert-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
trans-1,2-DCE	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,1-Trichloroethane	10	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Trichlorofluoromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,3-Trichloropropane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Vinyl chloride	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Xylenes, Total	ND	7.5		µg/L	5	3/13/2015 7:24:26 PM	R24833
Surr: 1,2-Dichloroethane-d4	87.1	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833
Surr: Dibromofluoromethane	86.3	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833
Surr: Toluene-d8	91.7	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 12:30:00 PM
Lab ID: 1503556-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	370	10		mg/L	10	3/16/2015 2:26:33 PM	18122
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	3/16/2015 2:26:33 PM	18122
Surr: DNOP	0	76.5-150	S	%REC	10	3/16/2015 2:26:33 PM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	31	2.5		mg/L	50	3/13/2015 10:40:16 PM	R24831
Surr: BFB	95.6	80-120		%REC	50	3/13/2015 10:40:16 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.0	0.010		mg/L	5	3/26/2015 3:03:23 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:47:26 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:47:26 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:47:26 PM	R25072
Iron	4.4	0.10	*	mg/L	5	3/26/2015 3:03:23 PM	R25095
Manganese	1.9	0.010	*	mg/L	5	3/26/2015 3:03:23 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:47:26 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:47:26 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.1	0.020	*	mg/L	10	3/26/2015 2:13:05 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:33:45 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:33:45 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:33:45 PM	18307
Iron	5.6	0.20	*	mg/L	10	3/26/2015 2:13:05 PM	18307
Manganese	1.9	0.020	*	mg/L	10	3/26/2015 2:13:05 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:33:45 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:33:45 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:14:03 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:21:48 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 3:03:07 PM	R25155
Uranium	ND	0.0010		mg/L	1	3/26/2015 7:21:48 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0032	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
Lead	0.0020	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
Selenium	0.0056	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
Uranium	ND	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:59:36 PM	18286

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 12:30:00 PM
Lab ID: 1503556-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Aniline	18	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4-Dimethylphenol	51	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 12:30:00 PM
Lab ID: 1503556-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1-Methylnaphthalene	120	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Methylphenol	61	10		µg/L	1	3/17/2015 7:11:52 PM	18138
3+4-Methylphenol	35	10		µg/L	1	3/17/2015 7:11:52 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Naphthalene	90	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Phenol	23	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Surr: 2-Fluorophenol	46.6	17.6-104		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: Phenol-d5	66.2	17.7-89.9		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: 2,4,6-Tribromophenol	91.5	16.3-122		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: Nitrobenzene-d5	83.8	45.3-117		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: 2-Fluorobiphenyl	85.7	43-113		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: 4-Terphenyl-d14	116	47.6-122		%REC	1	3/17/2015 7:11:52 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 12:30:00 PM
Lab ID: 1503556-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	9300	500		µg/L	500	3/13/2015 7:53:08 PM	R24833
Toluene	2000	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Ethylbenzene	740	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Methyl tert-butyl ether (MTBE)	370	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,4-Trimethylbenzene	590	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,3,5-Trimethylbenzene	100	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Naphthalene	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
1-Methylnaphthalene	ND	200		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Methylnaphthalene	ND	200		µg/L	50	3/13/2015 8:21:53 PM	R24833
Acetone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromodichloromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromoform	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromomethane	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Butanone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Carbon disulfide	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Carbon Tetrachloride	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chloroethane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chloroform	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chloromethane	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Chlorotoluene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
4-Chlorotoluene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
cis-1,2-DCE	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Dibromochloromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Dibromomethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,3-Dichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,4-Dichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Dichlorodifluoromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1-Dichloroethane	66	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1-Dichloroethene	58	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dichloropropane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,3-Dichloropropane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
2,2-Dichloropropane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-1
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 12:30:00 PM
Lab ID: 1503556-008
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Hexachlorobutadiene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Hexanone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Isopropylbenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
4-Isopropyltoluene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
4-Methyl-2-pentanone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Methylene Chloride	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
n-Butylbenzene	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
n-Propylbenzene	110	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
sec-Butylbenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Styrene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
tert-Butylbenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
trans-1,2-DCE	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,1-Trichloroethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,2-Trichloroethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Trichloroethene (TCE)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Trichlorofluoromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,3-Trichloropropane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Vinyl chloride	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Xylenes, Total	1900	75		µg/L	50	3/13/2015 8:21:53 PM	R24833
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833
Surr: 4-Bromofluorobenzene	87.1	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833
Surr: Dibromofluoromethane	85.8	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833
Surr: Toluene-d8	109	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 1:15:00 PM
Lab ID: 1503556-009
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 7:18:58 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 7:18:58 AM	18122
Surr: DNOP	157	76.5-150	S	%REC	1	3/14/2015 7:18:58 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1.3	0.050		mg/L	1	3/13/2015 11:09:27 PM	R24831
Surr: BFB	102	80-120		%REC	1	3/13/2015 11:09:27 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.13	0.0020		mg/L	1	3/25/2015 8:49:07 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:49:07 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:49:07 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:49:07 PM	R25072
Iron	0.11	0.020		mg/L	1	3/25/2015 8:49:07 PM	R25072
Manganese	0.56	0.0020	*	mg/L	1	3/25/2015 8:49:07 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:49:07 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:49:07 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.21	0.0020		mg/L	1	3/25/2015 7:35:25 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:35:25 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:35:25 PM	18307
Copper	0.0074	0.0060		mg/L	1	3/25/2015 7:35:25 PM	18307
Iron	4.6	0.20	*	mg/L	10	3/26/2015 2:19:46 PM	18307
Manganese	0.64	0.0020	*	mg/L	1	3/25/2015 7:35:25 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:35:25 PM	18307
Zinc	0.017	0.010		mg/L	1	3/25/2015 7:35:25 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.0047	0.0010		mg/L	1	3/26/2015 7:24:51 PM	R25105
Lead	ND	0.0010		mg/L	1	3/26/2015 7:24:51 PM	R25105
Selenium	0.0084	0.0010		mg/L	1	3/26/2015 7:24:51 PM	R25105
Uranium	0.049	0.0010	*	mg/L	1	3/26/2015 7:24:51 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0046	0.0010		mg/L	1	3/25/2015 3:20:56 PM	18307
Lead	0.0057	0.0010		mg/L	1	3/25/2015 3:20:56 PM	18307
Selenium	0.0043	0.0010		mg/L	1	3/25/2015 3:20:56 PM	18307
Uranium	0.048	0.0010	*	mg/L	1	3/25/2015 3:20:56 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:01:23 PM	18286

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 1:15:00 PM
Lab ID: 1503556-009
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 1:15:00 PM
Lab ID: 1503556-009
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Surr: 2-Fluorophenol	79.7	17.6-104		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: Phenol-d5	69.4	17.7-89.9		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: 2,4,6-Tribromophenol	105	16.3-122		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: Nitrobenzene-d5	89.7	45.3-117		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: 2-Fluorobiphenyl	101	43-113		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: 4-Terphenyl-d14	129	47.6-122	S	%REC	1	3/17/2015 7:39:50 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 1:15:00 PM
Lab ID: 1503556-009
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	200	10		µg/L	10	3/13/2015 8:50:38 PM	R24833
Toluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Ethylbenzene	4.1	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Methyl tert-butyl ether (MTBE)	44	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,4-Trimethylbenzene	5.1	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dichloroethane (EDC)	4.5	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Naphthalene	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1-Methylnaphthalene	ND	8.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Methylnaphthalene	ND	8.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Acetone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromodichloromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromoform	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromomethane	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Butanone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Carbon disulfide	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Carbon Tetrachloride	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chloroethane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chloroform	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chloromethane	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Chlorotoluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
4-Chlorotoluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
cis-1,2-DCE	9.3	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Dibromochloromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Dibromomethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1-Dichloroethane	50	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1-Dichloroethene	31	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dichloropropane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,3-Dichloropropane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2,2-Dichloropropane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-2
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 1:15:00 PM
Lab ID: 1503556-009
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Hexachlorobutadiene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Hexanone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Isopropylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
4-Isopropyltoluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
4-Methyl-2-pentanone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Methylene Chloride	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
n-Butylbenzene	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
n-Propylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
sec-Butylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Styrene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
tert-Butylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
trans-1,2-DCE	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,1-Trichloroethane	2.3	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Trichloroethene (TCE)	2.4	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Trichlorofluoromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Vinyl chloride	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Xylenes, Total	7.6	3.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Surr: 1,2-Dichloroethane-d4	81.4	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887
Surr: Dibromofluoromethane	88.9	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887
Surr: Toluene-d8	93.5	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:10:00 PM
Lab ID: 1503556-010
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	3/17/2015 5:23:36 PM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/17/2015 5:23:36 PM	18122
Surr: DNOP	127	76.5-150		%REC	1	3/17/2015 5:23:36 PM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	10	0.50		mg/L	10	3/13/2015 11:38:36 PM	R24831
Surr: BFB	121	80-120	S	%REC	10	3/13/2015 11:38:36 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.26	0.0020		mg/L	1	3/25/2015 8:51:05 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:51:05 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:51:05 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:51:05 PM	R25072
Iron	0.20	0.020		mg/L	1	3/25/2015 8:51:05 PM	R25072
Manganese	3.2	0.010	*	mg/L	5	3/26/2015 3:05:06 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:51:05 PM	R25072
Zinc	0.017	0.010		mg/L	1	3/25/2015 8:51:05 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.58	0.0020		mg/L	1	3/25/2015 7:37:07 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:37:07 PM	18307
Chromium	0.0064	0.0060		mg/L	1	3/25/2015 7:37:07 PM	18307
Copper	0.014	0.0060		mg/L	1	3/25/2015 7:37:07 PM	18307
Iron	7.5	0.20	*	mg/L	10	3/26/2015 2:21:27 PM	18307
Manganese	3.9	0.020	*	mg/L	10	3/26/2015 2:21:27 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:37:07 PM	18307
Zinc	0.017	0.010		mg/L	1	3/25/2015 7:37:07 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:17:06 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:34:05 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 3:06:10 PM	R25155
Uranium	0.038	0.0010	*	mg/L	1	3/26/2015 7:34:05 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0041	0.0010		mg/L	1	3/25/2015 3:24:07 PM	18307
Lead	0.013	0.0010		mg/L	1	3/25/2015 3:24:07 PM	18307
Selenium	0.0058	0.0050		mg/L	5	3/25/2015 6:07:01 PM	18307
Uranium	0.038	0.0010	*	mg/L	1	3/25/2015 3:24:07 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:03:10 PM	18286

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:10:00 PM
Lab ID: 1503556-010
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:10:00 PM
Lab ID: 1503556-010
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Naphthalene	17	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Surr: 2-Fluorophenol	80.2	17.6-104		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: Phenol-d5	74.0	17.7-89.9		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: 2,4,6-Tribromophenol	102	16.3-122		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: Nitrobenzene-d5	88.5	45.3-117		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: 2-Fluorobiphenyl	101	43-113		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: 4-Terphenyl-d14	113	47.6-122		%REC	1	3/17/2015 8:07:39 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:10:00 PM
Lab ID: 1503556-010
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	970	50		µg/L	50	3/13/2015 9:19:20 PM	R24833
Toluene	12	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Ethylbenzene	170	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Methyl tert-butyl ether (MTBE)	270	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,4-Trimethylbenzene	8.6	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dichloroethane (EDC)	12	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Naphthalene	18	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
1-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 9:47:55 PM	R24833
Acetone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromodichloromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromoform	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromomethane	ND	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Butanone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Carbon disulfide	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Carbon Tetrachloride	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chloroethane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chloroform	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chloromethane	ND	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
4-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
cis-1,2-DCE	55	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Dibromochloromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Dibromomethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1-Dichloroethane	280	50		µg/L	50	3/13/2015 9:19:20 PM	R24833
1,1-Dichloroethene	140	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,3-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
2,2-Dichloropropane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-25
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:10:00 PM
Lab ID: 1503556-010
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Hexachlorobutadiene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Hexanone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Isopropylbenzene	37	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
4-Isopropyltoluene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
4-Methyl-2-pentanone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Methylene Chloride	ND	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
n-Butylbenzene	16	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
n-Propylbenzene	51	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
sec-Butylbenzene	7.3	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Styrene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
tert-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
trans-1,2-DCE	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,1-Trichloroethane	53	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Trichloroethene (TCE)	31	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Trichlorofluoromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,3-Trichloropropane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Vinyl chloride	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Xylenes, Total	ND	7.5		µg/L	5	3/13/2015 9:47:55 PM	R24833
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833
Surr: 4-Bromofluorobenzene	100	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833
Surr: Dibromofluoromethane	102	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833
Surr: Toluene-d8	99.8	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:36:00 PM
Lab ID: 1503556-011
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 8:13:13 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 8:13:13 AM	18122
Surr: DNOP	143	76.5-150		%REC	1	3/14/2015 8:13:13 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.077	0.050		mg/L	1	3/14/2015 12:07:43 AM	R24831
Surr: BFB	85.7	80-120		%REC	1	3/14/2015 12:07:43 AM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.17	0.0020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:53:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:53:02 PM	R25072
Iron	0.026	0.020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Manganese	0.032	0.0020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:53:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:53:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.20	0.0020		mg/L	1	3/25/2015 7:38:56 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:38:56 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:38:56 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:38:56 PM	18307
Iron	2.2	0.10	*	mg/L	5	3/27/2015 3:53:50 PM	18307
Manganese	0.12	0.0020	*	mg/L	1	3/25/2015 7:38:56 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:38:56 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:38:56 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:20:10 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:37:08 PM	R25105
Selenium	0.013	0.010		mg/L	10	3/30/2015 2:20:10 PM	R25155
Uranium	0.054	0.010	*	mg/L	10	3/30/2015 2:20:10 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/27/2015 3:19:48 PM	18307
Lead	ND	0.010		mg/L	10	3/27/2015 3:19:48 PM	18307
Selenium	ND	0.010		mg/L	10	3/27/2015 3:19:48 PM	18307
Uranium	0.056	0.010	*	mg/L	10	3/27/2015 3:19:48 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:08:40 PM	18286

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:36:00 PM
Lab ID: 1503556-011
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138

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Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:36:00 PM
Lab ID: 1503556-011
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Surr: 2-Fluorophenol	11.9	17.6-104	S	%REC	1	3/17/2015 8:35:06 PM	18138
Surr: Phenol-d5	24.3	17.7-89.9		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: 2,4,6-Tribromophenol	19.7	16.3-122		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: Nitrobenzene-d5	84.4	45.3-117		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: 2-Fluorobiphenyl	92.9	43-113		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: 4-Terphenyl-d14	110	47.6-122		%REC	1	3/17/2015 8:35:06 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:36:00 PM
Lab ID: 1503556-011
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Toluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Methyl tert-butyl ether (MTBE)	54	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dichloroethane (EDC)	14	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Naphthalene	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Acetone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromoform	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromomethane	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Butanone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Carbon disulfide	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chloroethane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chloroform	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chloromethane	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
cis-1,2-DCE	1.6	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1-Dichloroethane	21	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1-Dichloroethene	40	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-31
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 2:36:00 PM
Lab ID: 1503556-011
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Hexanone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Styrene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,1-Trichloroethane	3.9	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,2-Trichloroethane	1.5	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Trichloroethene (TCE)	2.5	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Xylenes, Total	ND	1.5		µg/L	1	3/16/2015 12:09:04 PM	R24859
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859
Surr: 4-Bromofluorobenzene	86.9	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859
Surr: Dibromofluoromethane	89.8	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859
Surr: Toluene-d8	90.8	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:05:00 PM
Lab ID: 1503556-012
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 8:40:31 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 8:40:31 AM	18122
Surr: DNOP	171	76.5-150	S	%REC	1	3/14/2015 8:40:31 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/14/2015 12:36:49 AM	R24831
Surr: BFB	87.0	80-120		%REC	1	3/14/2015 12:36:49 AM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.19	0.0020		mg/L	1	3/25/2015 8:55:02 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:55:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:55:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:55:02 PM	R25072
Iron	0.11	0.020		mg/L	1	3/25/2015 8:55:02 PM	R25072
Manganese	0.20	0.0020	*	mg/L	1	3/25/2015 8:55:02 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:55:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:55:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.28	0.0020		mg/L	1	3/25/2015 7:51:20 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:51:20 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:51:20 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:51:20 PM	18307
Iron	5.6	0.20	*	mg/L	10	3/26/2015 2:28:07 PM	18307
Manganese	0.34	0.0020	*	mg/L	1	3/25/2015 7:51:20 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:51:20 PM	18307
Zinc	0.023	0.010		mg/L	1	3/25/2015 7:51:20 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:29:24 PM	R25155
Lead	ND	0.010		mg/L	10	3/30/2015 2:29:24 PM	R25155
Selenium	0.020	0.010		mg/L	10	3/30/2015 2:29:24 PM	R25155
Uranium	0.070	0.010	*	mg/L	10	3/30/2015 2:29:24 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/27/2015 3:22:59 PM	18307
Lead	ND	0.010		mg/L	10	3/27/2015 3:22:59 PM	18307
Selenium	0.015	0.010		mg/L	10	3/27/2015 3:22:59 PM	18307
Uranium	0.085	0.010	*	mg/L	10	3/27/2015 3:22:59 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:10:28 PM	18286

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:05:00 PM
Lab ID: 1503556-012
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:05:00 PM
Lab ID: 1503556-012
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Surr: 2-Fluorophenol	44.3	17.6-104		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: Phenol-d5	60.8	17.7-89.9		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: 2,4,6-Tribromophenol	55.1	16.3-122		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: Nitrobenzene-d5	81.8	45.3-117		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: 2-Fluorobiphenyl	88.8	43-113		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: 4-Terphenyl-d14	112	47.6-122		%REC	1	3/17/2015 9:02:54 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:05:00 PM
Lab ID: 1503556-012
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-40
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:05:00 PM
Lab ID: 1503556-012
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 10:45:21 PM	R24833
Surr: 1,2-Dichloroethane-d4	84.8	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833
Surr: Dibromofluoromethane	82.5	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833
Surr: Toluene-d8	100	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:36:00 PM
Lab ID: 1503556-013
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 9:07:55 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 9:07:55 AM	18122
Surr: DNOP	136	76.5-150		%REC	1	3/14/2015 9:07:55 AM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/14/2015 1:05:57 AM	R24831
Surr: BFB	87.8	80-120		%REC	1	3/14/2015 1:05:57 AM	R24831
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.17	0.010		mg/L	5	3/26/2015 3:06:46 PM	R25095
Cadmium	ND	0.010		mg/L	5	3/26/2015 3:06:46 PM	R25095
Chromium	0.048	0.030		mg/L	5	3/26/2015 3:06:46 PM	R25095
Copper	ND	0.030		mg/L	5	3/26/2015 3:06:46 PM	R25095
Iron	0.49	0.10	*	mg/L	5	3/26/2015 3:06:46 PM	R25095
Manganese	3.7	0.010	*	mg/L	5	3/26/2015 3:06:46 PM	R25095
Silver	ND	0.025		mg/L	5	3/30/2015 6:32:32 PM	R25178
Zinc	ND	0.050		mg/L	5	3/27/2015 4:37:55 PM	R25152
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.24	0.010		mg/L	5	3/26/2015 2:29:53 PM	18307
Cadmium	ND	0.010		mg/L	5	3/26/2015 2:29:53 PM	18307
Chromium	0.031	0.030		mg/L	5	3/26/2015 2:29:53 PM	18307
Copper	ND	0.030		mg/L	5	3/26/2015 2:29:53 PM	18307
Iron	3.2	0.10	*	mg/L	5	3/26/2015 2:29:53 PM	18307
Manganese	3.7	0.010	*	mg/L	5	3/26/2015 2:29:53 PM	18307
Silver	ND	0.025		mg/L	5	3/26/2015 2:29:53 PM	18307
Zinc	ND	0.050		mg/L	5	3/27/2015 4:07:31 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.050	*	mg/L	50	3/30/2015 3:09:13 PM	R25155
Lead	ND	0.050		mg/L	50	3/30/2015 3:09:13 PM	R25155
Selenium	0.11	0.050	*	mg/L	50	3/30/2015 3:09:13 PM	R25155
Uranium	0.15	0.050	*	mg/L	50	3/30/2015 3:09:13 PM	R25155
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.050	*	mg/L	50	3/27/2015 4:03:35 PM	18307
Lead	ND	0.020		mg/L	20	3/25/2015 6:16:35 PM	18307
Selenium	0.071	0.020	*	mg/L	20	3/25/2015 6:16:35 PM	18307
Uranium	0.14	0.020	*	mg/L	20	3/25/2015 6:16:35 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:12:16 PM	18286

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:36:00 PM
Lab ID: 1503556-013
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Aniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Anthracene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Azobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzoic acid	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Carbazole	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Chrysene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:36:00 PM
Lab ID: 1503556-013
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Fluoranthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Fluorene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Isophorone	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Naphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
Phenanthrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Phenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Pyrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Pyridine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Surr: 2-Fluorophenol	4.72	17.6-104	S	%REC	1	3/19/2015 4:10:21 PM	18138
Surr: Phenol-d5	8.76	17.7-89.9	S	%REC	1	3/19/2015 4:10:21 PM	18138
Surr: 2,4,6-Tribromophenol	7.06	16.3-122	S	%REC	1	3/19/2015 4:10:21 PM	18138
Surr: Nitrobenzene-d5	74.3	45.3-117		%REC	1	3/19/2015 4:10:21 PM	18138
Surr: 2-Fluorobiphenyl	74.3	43-113		%REC	1	3/19/2015 4:10:21 PM	18138
Surr: 4-Terphenyl-d14	90.7	47.6-122		%REC	1	3/19/2015 4:10:21 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:36:00 PM
Lab ID: 1503556-013
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-43
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 3:36:00 PM
Lab ID: 1503556-013
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 11:14:09 PM	R24833
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833
Surr: 4-Bromofluorobenzene	85.3	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833
Surr: Toluene-d8	90.1	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 4:07:00 PM
Lab ID: 1503556-014
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	27	1.0		mg/L	1	3/17/2015 5:45:04 PM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/17/2015 5:45:04 PM	18122
Surr: DNOP	96.3	76.5-150		%REC	1	3/17/2015 5:45:04 PM	18122
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	3/16/2015 6:06:44 PM	R24858
Surr: BFB	84.7	80-120		%REC	10	3/16/2015 6:06:44 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.094	0.0020		mg/L	1	3/25/2015 9:11:34 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:11:34 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:11:34 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:11:34 PM	R25072
Iron	0.11	0.020		mg/L	1	3/25/2015 9:11:34 PM	R25072
Manganese	0.54	0.0020	*	mg/L	1	3/25/2015 9:11:34 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:11:34 PM	R25072
Zinc	0.036	0.010		mg/L	1	3/25/2015 9:11:34 PM	R25072
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.16	0.0020		mg/L	1	3/25/2015 7:54:48 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:54:48 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:54:48 PM	18307
Copper	0.0071	0.0060		mg/L	1	3/25/2015 7:54:48 PM	18307
Iron	2.5	0.10	*	mg/L	5	3/26/2015 2:31:49 PM	18307
Manganese	0.58	0.0020	*	mg/L	1	3/25/2015 7:54:48 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:54:48 PM	18307
Zinc	0.012	0.010		mg/L	1	3/25/2015 7:54:48 PM	18307
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:35:30 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:46:18 PM	R25105
Selenium	0.015	0.010		mg/L	10	3/30/2015 2:35:30 PM	R25155
Uranium	0.040	0.0010	*	mg/L	1	3/26/2015 7:46:18 PM	R25105
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0035	0.0010		mg/L	1	3/25/2015 3:43:17 PM	18307
Lead	0.0034	0.0010		mg/L	1	3/25/2015 3:43:17 PM	18307
Selenium	0.0075	0.0010		mg/L	1	3/25/2015 3:43:17 PM	18307
Uranium	0.039	0.0010	*	mg/L	1	3/25/2015 3:43:17 PM	18307
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:14:04 PM	18286

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 4:07:00 PM
Lab ID: 1503556-014
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 4:07:00 PM
Lab ID: 1503556-014
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Phenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Surr: 2-Fluorophenol	71.8	17.6-104		%REC	1	3/18/2015 6:54:38 PM	18138
Surr: Phenol-d5	61.2	17.7-89.9		%REC	1	3/18/2015 6:54:38 PM	18138
Surr: 2,4,6-Tribromophenol	0	16.3-122	S	%REC	1	3/18/2015 6:54:38 PM	18138
Surr: Nitrobenzene-d5	92.9	45.3-117		%REC	1	3/18/2015 6:54:38 PM	18138
Surr: 2-Fluorobiphenyl	0	43-113	S	%REC	1	3/18/2015 6:54:38 PM	18138
Surr: 4-Terphenyl-d14	91.1	47.6-122		%REC	1	3/18/2015 6:54:38 PM	18138
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 4:07:00 PM
Lab ID: 1503556-014
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	1.7	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Toluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,4-Trimethylbenzene	3.9	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,3,5-Trimethylbenzene	2.6	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Naphthalene	14	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1-Methylnaphthalene	7.5	4.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Methylnaphthalene	6.1	4.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Acetone	10	10		µg/L	1	3/19/2015 11:20:03 AM	R24923
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Bromoform	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Bromomethane	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Butanone	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Carbon disulfide	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chloroethane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chloroform	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chloromethane	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-42
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015 4:07:00 PM
Lab ID: 1503556-014
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Hexanone	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Styrene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Xylenes, Total	10	1.5		µg/L	1	3/16/2015 12:37:37 PM	R24859
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859
Surr: Dibromofluoromethane	106	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859
Surr: Toluene-d8	94.4	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blank Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015
Lab ID: 1503556-015
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Aniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blank Duplicate
Project: 2015 1ST QTR (MKTF)
Collection Date: 3/11/2015
Lab ID: 1503556-015
Matrix: AQUEOUS
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Phenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Surr: 2-Fluorophenol	79.0	17.6-104		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: Phenol-d5	73.6	17.7-89.9		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: 2,4,6-Tribromophenol	103	16.3-122		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: Nitrobenzene-d5	90.5	45.3-117		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: 2-Fluorobiphenyl	92.4	43-113		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: 4-Terphenyl-d14	117	47.6-122		%REC	1	3/18/2015 10:29:32 AM	18138

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503556-016
Matrix: TRIP BLANK
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 8:32:42 PM	R24858
Surr: BFB	84.7	80-120		%REC	1	3/16/2015 8:32:42 PM	R24858
EPA METHOD 8260B: VOLATILES						Analyst:	**KJH**
Benzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Toluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Naphthalene	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Acetone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromoform	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromomethane	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Butanone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Carbon disulfide	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chloroethane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chloroform	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chloromethane	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 1ST QTR (MKTF)
Collection Date:
Lab ID: 1503556-016
Matrix: TRIP BLANK
Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Hexanone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Styrene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 2:06:45 AM	R24833
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833
Surr: Toluene-d8	92.5	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Manganese	0.47	0.0020	0.5000	0	94.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739897** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **739898** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **1503556-002FMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-27** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740000** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.08568	97.6	70	130			
Cadmium	0.52	0.0020	0.5000	0	105	70	130			
Chromium	0.50	0.0060	0.5000	0	99.2	70	130			
Copper	0.59	0.0060	0.5000	0	119	70	130			
Iron	0.66	0.020	0.5000	0.1482	102	70	130			
Manganese	0.58	0.0020	0.5000	0.09974	96.4	70	130			
Silver	0.085	0.0050	0.1000	0	85.5	70	130			
Zinc	0.50	0.010	0.5000	0.006770	98.8	70	130			

Sample ID **1503556-002FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-27** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740001** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.58	0.0020	0.5000	0.08568	98.0	70	130	0.367	20	
Cadmium	0.52	0.0020	0.5000	0	105	70	130	0.124	20	
Chromium	0.50	0.0060	0.5000	0	99.2	70	130	0.0121	20	
Copper	0.59	0.0060	0.5000	0	118	70	130	1.10	20	
Iron	0.68	0.020	0.5000	0.1482	105	70	130	2.57	20	
Manganese	0.58	0.0020	0.5000	0.09974	96.5	70	130	0.0172	20	
Silver	0.088	0.0050	0.1000	0	88.1	70	130	3.06	20	
Zinc	0.50	0.010	0.5000	0.006770	99.5	70	130	0.663	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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503556-012FMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-40** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.69	0.0020	0.5000	0.1918	98.7	70	130			
Cadmium	0.54	0.0020	0.5000	0	108	70	130			
Chromium	0.50	0.0060	0.5000	0	100	70	130			
Copper	0.63	0.0060	0.5000	0	126	70	130			
Iron	0.60	0.020	0.5000	0.1148	96.4	70	130			
Manganese	0.69	0.0020	0.5000	0.2034	97.8	70	130			
Silver	0.12	0.0050	0.1000	0	117	70	130			
Zinc	0.48	0.010	0.5000	0.006770	94.6	70	130			

Sample ID **1503556-012FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-40** Batch ID: **R25072** RunNo: **25072**
Prep Date: Analysis Date: **3/25/2015** SeqNo: **740017** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.67	0.0020	0.5000	0.1918	95.3	70	130	2.49	20	
Cadmium	0.53	0.0020	0.5000	0	107	70	130	1.65	20	
Chromium	0.49	0.0060	0.5000	0	98.4	70	130	1.63	20	
Copper	0.61	0.0060	0.5000	0	123	70	130	2.37	20	
Iron	0.61	0.020	0.5000	0.1148	98.4	70	130	1.72	20	
Manganese	0.68	0.0020	0.5000	0.2034	94.5	70	130	2.41	20	
Silver	0.11	0.0050	0.1000	0	114	70	130	2.84	20	
Zinc	0.47	0.010	0.5000	0.006770	92.4	70	130	2.32	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740730** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Cadmium	0.48	0.0020	0.5000	0	96.8	85	115			
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			
Copper	0.47	0.0060	0.5000	0	94.8	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Sample ID **1503556-006FMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-26** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740776** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.9	0.010	2.500	1.357	99.9	70	130			

Sample ID **1503556-006FMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MKTF-26** Batch ID: **R25095** RunNo: **25095**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **740777** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.8	0.010	2.500	1.357	97.7	70	130	1.41	20	

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25152** RunNo: **25152**
Prep Date: Analysis Date: **3/27/2015** SeqNo: **743103** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25152** RunNo: **25152**
Prep Date: Analysis Date: **3/27/2015** SeqNo: **743104** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.50	0.010	0.5000	0	99.4	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25178** RunNo: **25178**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **744023** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 200.7: Dissolved Metals**					
Client ID:	**PBW**	Batch ID:	**R25178**		RunNo:	**25178**					
Prep Date:		Analysis Date:	**3/30/2015**		SeqNo:	**744023**		Units:	**mg/L**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver		ND	0.0050								

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 200.7: Dissolved Metals**					
Client ID:	**LCSW**	Batch ID:	**R25178**		RunNo:	**25178**					
Prep Date:		Analysis Date:	**3/30/2015**		SeqNo:	**744024**		Units:	**mg/L**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver		0.10	0.0050	0.1000	0	101	85	115			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18307** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18307** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739891** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-18307** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18307** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739892** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.4	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.0	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Copper	0.49	0.0060	0.5000	0	97.8	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.48	0.010	0.5000	0	97.0	85	115			

Sample ID **1503556-005EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-29** Batch ID: **18307** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739968** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.05671	96.3	70	130			
Cadmium	0.50	0.0020	0.5000	0	100	70	130			
Chromium	0.49	0.0060	0.5000	0	97.4	70	130			
Copper	0.55	0.0060	0.5000	0	110	70	130			
Manganese	0.82	0.0020	0.5000	0.3563	92.2	70	130			
Silver	0.11	0.0050	0.1000	0	108	70	130			
Zinc	0.48	0.010	0.5000	0.004020	94.9	70	130			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503556-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-29** Batch ID: **18307** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739969** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.05671	99.7	70	130	3.10	20	
Cadmium	0.51	0.0020	0.5000	0	103	70	130	2.44	20	
Chromium	0.50	0.0060	0.5000	0	100	70	130	2.81	20	
Copper	0.58	0.0060	0.5000	0	116	70	130	4.58	20	
Manganese	0.85	0.0020	0.5000	0.3563	98.3	70	130	3.64	20	
Silver	0.11	0.0050	0.1000	0	111	70	130	2.28	20	
Zinc	0.49	0.010	0.5000	0.004020	97.9	70	130	3.08	20	

Sample ID **1503556-011EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-31** Batch ID: **18307** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739976** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.69	0.0020	0.5000	0.2030	96.8	70	130			
Cadmium	0.51	0.0020	0.5000	0	103	70	130			
Chromium	0.49	0.0060	0.5000	0	98.5	70	130			
Copper	0.57	0.0060	0.5000	0	114	70	130			
Manganese	0.59	0.0020	0.5000	0.1165	95.4	70	130			
Silver	0.11	0.0050	0.1000	0	111	70	130			
Zinc	0.47	0.010	0.5000	0.007820	91.8	70	130			

Sample ID **1503556-011EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-31** Batch ID: **18307** RunNo: **25072**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **739980** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.67	0.0020	0.5000	0.2030	92.5	70	130	3.17	20	
Cadmium	0.49	0.0020	0.5000	0	98.9	70	130	3.65	20	
Chromium	0.47	0.0060	0.5000	0	94.9	70	130	3.72	20	
Copper	0.56	0.0060	0.5000	0	112	70	130	1.60	20	
Manganese	0.58	0.0020	0.5000	0.1165	92.1	70	130	2.81	20	
Silver	0.11	0.0050	0.1000	0	110	70	130	1.31	20	
Zinc	0.45	0.010	0.5000	0.007820	88.2	70	130	3.95	20	

Sample ID **1503556-005EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-29** Batch ID: **18307** RunNo: **25152**
Prep Date: **3/24/2015** Analysis Date: **3/27/2015** SeqNo: **743108** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.8	0.10	0.5000	0.8131	196	70	130			S

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503556-005EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-29** Batch ID: **18307** RunNo: **25152**
Prep Date: **3/24/2015** Analysis Date: **3/27/2015** SeqNo: **743109** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.9	0.10	0.5000	0.8131	213	70	130	4.58	20	S

Sample ID **1503556-011EMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-31** Batch ID: **18307** RunNo: **25152**
Prep Date: **3/24/2015** Analysis Date: **3/27/2015** SeqNo: **743112** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	4.3	0.10	0.5000	2.170	424	70	130			S

Sample ID **1503556-011EMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MKTF-31** Batch ID: **18307** RunNo: **25152**
Prep Date: **3/24/2015** Analysis Date: **3/27/2015** SeqNo: **743116** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	4.1	0.10	0.5000	2.170	388	70	130	4.26	20	S

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503556-007FMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-24** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741172** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.028	0.0010	0.02500	0.001450	107	70	130			

Sample ID **1503556-007FMSD** SampType: **MSD** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-24** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741173** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.028	0.0010	0.02500	0.001450	107	70	130	0.319	20	

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741199** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741200** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741201** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741202** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741203** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25105** RunNo: **25105**
Prep Date: Analysis Date: **3/26/2015** SeqNo: **741204** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **1503556-007FMS** SampType: **MS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-24** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743877** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.004936	103	70	130			
Selenium	0.13	0.0050	0.1250	0.01131	97.8	70	130			
Uranium	0.18	0.0050	0.1250	0.04315	113	70	130			

Sample ID **1503556-007FMSD** SampType: **MSD** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-24** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.004936	103	70	130	0.273	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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503556-007FMSD** SampType: **MSD** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **MKTF-24** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.13	0.0050	0.1250	0.01131	98.6	70	130	0.760	20	
Uranium	0.18	0.0050	0.1250	0.04315	112	70	130	0.454	20	

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.7	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743934** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.8	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.0	85	115			
Lead	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25155** RunNo: **25155**
Prep Date: Analysis Date: **3/30/2015** SeqNo: **743936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**		
Client ID: **PBW**	Batch ID: **R25155**	RunNo: **25155**		
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **743936**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**		
Client ID: **PBW**	Batch ID: **R25155**	RunNo: **25155**		
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **743937**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**		
Client ID: **PBW**	Batch ID: **R25155**	RunNo: **25155**		
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **743938**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **1503556-006EMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **MKTF-26** Batch ID: **18307** RunNo: **25061**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **740126** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.028	0.0010	0.02500	0.003985	95.1	70	130			
Lead	0.030	0.0010	0.02500	0.002893	110	70	130			
Selenium	0.025	0.0010	0.02500	0.004744	82.1	70	130			
Uranium	0.073	0.0010	0.02500	0.04499	112	70	130			E

Sample ID **LLLCS-18307** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **18307** RunNo: **25061**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **740312** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.8	85	115			
Lead	0.026	0.0010	0.02500	0	103	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID **MB-18307** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **18307** RunNo: **25061**
Prep Date: **3/24/2015** Analysis Date: **3/25/2015** SeqNo: **740314** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**MB-18286**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**18286**	RunNo:	**25035**
Prep Date:	**3/23/2015**	Analysis Date:	**3/24/2015**	SeqNo:	**738271** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-18286**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**18286**	RunNo:	**25035**
Prep Date:	**3/23/2015**	Analysis Date:	**3/24/2015**	SeqNo:	**738272** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	108	80	120			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **MB-18123** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **18123** RunNo: **24810**
Prep Date: **3/13/2015** Analysis Date: **3/13/2015** SeqNo: **731809** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1.5		1.000		146	76.5	150			

Sample ID **MB-18122** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **18122** RunNo: **24848**
Prep Date: **3/13/2015** Analysis Date: **3/16/2015** SeqNo: **731819** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		109	76.5	150			

Sample ID **LCS-18122** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **18122** RunNo: **24810**
Prep Date: **3/13/2015** Analysis Date: **3/14/2015** SeqNo: **731829** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	109	60.1	156			
Surr: DNOP	0.62		0.5000		123	76.5	150			

Sample ID **1503556-002CMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **MKTF-27** Batch ID: **18122** RunNo: **24810**
Prep Date: **3/13/2015** Analysis Date: **3/14/2015** SeqNo: **731841** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	115	75.9	164			
Surr: DNOP	0.79		0.5000		157	76.5	150			S

Sample ID **1503556-002CMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **MKTF-27** Batch ID: **18122** RunNo: **24810**
Prep Date: **3/13/2015** Analysis Date: **3/14/2015** SeqNo: **731842** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	120	75.9	164	4.74	22.1	
Surr: DNOP	0.71		0.5000		143	76.5	150	0	0	

Sample ID **LCS-18123** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **18123** RunNo: **24848**
Prep Date: **3/13/2015** Analysis Date: **3/16/2015** SeqNo: **731923** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID	**LCS-18123**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**
Client ID:	**LCSW**	Batch ID:	**18123**	RunNo:	**24848**
Prep Date:	**3/13/2015**	Analysis Date:	**3/16/2015**	SeqNo:	**731923** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0.89		0.5000		177	76.5	150			S

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R24831** RunNo: **24831**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731426** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.8	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R24831** RunNo: **24831**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731427** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	80	120			
Surr: BFB	19		20.00		97.2	80	120			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R24858** RunNo: **24858**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732143** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		87.6	80	120			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R24858** RunNo: **24858**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732146** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	80	120			
Surr: BFB	19		20.00		96.2	80	120			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R24833**	RunNo: **24833**	
Prep Date:	Analysis Date: **3/13/2015**	SeqNo: **731463**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731463** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	8.9		10.00		88.7	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731465** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.8	70	130			
Toluene	20	1.0	20.00	0	98.3	70	130			
Chlorobenzene	18	1.0	20.00	0	89.0	70	130			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731465** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	97.6	75.6	144			
Trichloroethene (TCE)	17	1.0	20.00	0	85.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.7	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID **1503556-002a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-27** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731471** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.3	70	130			
Toluene	17	1.0	20.00	0	86.0	70	130			
Chlorobenzene	16	1.0	20.00	0	77.8	70	130			
1,1-Dichloroethene	20	1.0	20.00	0.4560	98.4	70	130			
Trichloroethene (TCE)	15	1.0	20.00	0	74.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **1503556-002a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-27** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/13/2015** SeqNo: **731472** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.7	70	130	5.72	20	
Toluene	18	1.0	20.00	0	88.4	70	130	2.77	20	
Chlorobenzene	17	1.0	20.00	0	83.2	70	130	6.60	20	
1,1-Dichloroethene	18	1.0	20.00	0.4560	90.2	70	130	8.57	20	
Trichloroethene (TCE)	16	1.0	20.00	0	78.1	70	130	4.24	20	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130	0	0	
Surr: Dibromofluoromethane	9.2		10.00		91.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		100	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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **b4**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R24833**	RunNo: **24833**	
Prep Date:	Analysis Date: **3/14/2015**	SeqNo: **731503**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **b4** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/14/2015** SeqNo: **731503** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.8	70	130			
Surr: Toluene-d8	9.3		10.00		93.0	70	130			

Sample ID **100ng lcs3** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/14/2015** SeqNo: **731505** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.3	70	130			
Toluene	16	1.0	20.00	0	81.8	70	130			
Chlorobenzene	17	1.0	20.00	0	83.2	70	130			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **100ng lcs3** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24833** RunNo: **24833**
Prep Date: Analysis Date: **3/14/2015** SeqNo: **731505** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18	1.0	20.00	0	90.9	75.6	144			
Trichloroethene (TCE)	15	1.0	20.00	0	76.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		87.3	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.1	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24859** RunNo: **24859**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732227** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R24859**	RunNo: **24859**	
Prep Date:	Analysis Date: **3/16/2015**	SeqNo: **732227**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		84.3	70	130			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24859** RunNo: **24859**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732227** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.3		10.00		92.6	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.3	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24859** RunNo: **24859**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732237** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	99.9	70	130			
Chlorobenzene	19	1.0	20.00	0	94.2	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.5	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24859** RunNo: **24859**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732274** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24859**	RunNo: **24859**			
Prep Date:	Analysis Date: **3/16/2015**	SeqNo: **732274**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **b2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24859** RunNo: **24859**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732274** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.8	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24859** RunNo: **24859**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732276** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	18	1.0	20.00	0	92.2	70	130			
Chlorobenzene	18	1.0	20.00	0	91.0	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.5	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24887** RunNo: **24887**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733209** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24887**	RunNo: **24887**			
Prep Date:	Analysis Date: **3/17/2015**	SeqNo: **733209**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24887** RunNo: **24887**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733209** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	8.9		10.00		89.5	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24887** RunNo: **24887**
Prep Date: Analysis Date: **3/17/2015** SeqNo: **733211** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	19	1.0	20.00	0	92.8	70	130			
Chlorobenzene	19	1.0	20.00	0	95.3	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.3	70	130			
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.1	70	130			
Surr: Toluene-d8	9.4		10.00		94.0	70	130			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24923** RunNo: **24923**
Prep Date: Analysis Date: **3/19/2015** SeqNo: **734333** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acetone	ND	10								
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.2	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.8	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.9	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID **100nglcs200nganxs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24923** RunNo: **24923**
Prep Date: Analysis Date: **3/19/2015** SeqNo: **734335** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.0		10.00		80.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18138**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18138**	RunNo: **24891**			
Prep Date: **3/16/2015**	Analysis Date: **3/17/2015**	SeqNo: **733319**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **mb-18138**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **18138**	RunNo: **24891**			
Prep Date: **3/16/2015**	Analysis Date: **3/17/2015**	SeqNo: **733319**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	150		200.0		75.5	17.6	104			
Surr: Phenol-d5	140		200.0		69.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		86.6	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		70.1	45.3	117			
Surr: 2-Fluorobiphenyl	73		100.0		73.1	43	113			
Surr: 4-Terphenyl-d14	100		100.0		100	47.6	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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcs-18138** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18138** RunNo: **24891**
Prep Date: **3/16/2015** Analysis Date: **3/17/2015** SeqNo: **733321** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	76	10	100.0	0	75.9	47.9	114			
4-Chloro-3-methylphenol	160	10	200.0	0	82.1	51.7	122			
2-Chlorophenol	150	10	200.0	0	74.2	40.7	113			
1,4-Dichlorobenzene	71	10	100.0	0	71.0	39.6	99.9			
2,4-Dinitrotoluene	66	10	100.0	0	66.1	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.3	51.2	111			
4-Nitrophenol	140	10	200.0	0	70.9	15.7	86.9			
Pentachlorophenol	160	20	200.0	0	78.1	21.6	104			
Phenol	150	10	200.0	0	76.4	28.6	71.7			S
Pyrene	110	10	100.0	0	109	54.2	128			
1,2,4-Trichlorobenzene	86	10	100.0	0	86.0	40.9	101			
Surr: 2-Fluorophenol	160		200.0		80.5	17.6	104			
Surr: Phenol-d5	160		200.0		80.5	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122			
Surr: Nitrobenzene-d5	74		100.0		73.7	45.3	117			
Surr: 2-Fluorobiphenyl	82		100.0		82.3	43	113			
Surr: 4-Terphenyl-d14	120		100.0		117	47.6	122			

Sample ID **lcsd-18138** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18138** RunNo: **24891**
Prep Date: **3/16/2015** Analysis Date: **3/17/2015** SeqNo: **733322** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	83.3	47.9	114	9.40	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	82.8	51.7	122	0.910	25.9	
2-Chlorophenol	150	10	200.0	0	74.9	40.7	113	1.01	22.5	
1,4-Dichlorobenzene	77	10	100.0	0	77.0	39.6	99.9	8.14	24.6	
2,4-Dinitrotoluene	79	10	100.0	0	79.4	40.8	113	18.3	25.3	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.4	51.2	111	5.04	23.6	
4-Nitrophenol	170	10	200.0	0	85.9	15.7	86.9	19.1	34.7	
Pentachlorophenol	160	20	200.0	0	80.1	21.6	104	2.49	32.8	
Phenol	160	10	200.0	0	80.2	28.6	71.7	4.75	25.5	S
Pyrene	110	10	100.0	0	108	54.2	128	1.27	31.4	
1,2,4-Trichlorobenzene	90	10	100.0	0	90.5	40.9	101	5.08	25.9	
Surr: 2-Fluorophenol	170		200.0		82.6	17.6	104	0	0	
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	88		100.0		87.9	43	113	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 Not In Range
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#: **1503556**
06-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1ST QTR (MKTF)

Sample ID **lcsd-18138** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18138** RunNo: **24891**
Prep Date: **3/16/2015** Analysis Date: **3/17/2015** SeqNo: **733322** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		107	47.6	122	0	0	

Sample ID **mb-18139** SampType: **MBLK** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734001** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	122			

Sample ID **lcs-18139** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734002** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID **lcsd-18139** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **18139** RunNo: **24913**
Prep Date: **3/16/2015** Analysis Date: **3/18/2015** SeqNo: **734003** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	0	0	
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1503556** RcptNo: **1**

Received by/date: 03/12/15

Logged By: **Lindsay Mangin** **3/12/2015 4:00:00 PM**

Completed By: **Lindsay Mangin** **3/13/2015 7:39:57 AM**

Reviewed By: 03/13/15

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 26
(<2 or >12 unless noted)
Adjusted? 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	3.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler: C. JOHNSON

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503556	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)										Air Bubbles (Y or N)
3/11/2015	700	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	-001	X														
3/11/2015	825	AQUEOUS	MKTF-27	MISC	MISC	-002	X	X	X	X	X										
3/11/2015	855	AQUEOUS	MKTF-28	MISC	MISC	-003	X	X	X	X	X										
3/11/2015	925	AQUEOUS	MKTF-30	MISC	MISC	-004	X	X	X	X	X										
3/11/2015	950	AQUEOUS	MKTF-29	MISC	MISC	-005	X	X	X	X	X										
3/11/2015	1036	AQUEOUS	MKTF-26	MISC	MISC	-006	X	X	X	X	X										
3/11/2015	1156	AQUEOUS	MKTF-24	MISC	MISC	-007	X	X	X	X	X										
3/11/2015	1230	AQUEOUS	MKTF-1	MISC	MISC	-008	X	X	X	X	X										
3/11/2015	1315	AQUEOUS	MKTF-2	MISC	MISC	-009	X	X	X	X	X										
3/11/2015	1410	AQUEOUS	MKTF-25	MISC	MISC	-010	X	X	X	X	X										
3/11/2015	1436	AQUEOUS	MKTF-31	MISC	MISC	-011	X	X	X	X	X										
3/11/2015	1505	AQUEOUS	MKTF-40	MISC	MISC	-012	X	X	X	X	X										
3/11/2015	1536	AQUEOUS	MKTF-43	MISC	MISC	-013	X	X	X	X	X										
3/11/2015	1607	AQUEOUS	MKTF-42	MISC	MISC	-014	X	X	X	X	X										
3/11/2015		AQUEOUS	BLANK DUPLICATE	1L AMBER	NONE	-015			X												
3/11/2015		AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-016	X	X													

Date:	Time:	Relinquished by:	Received by:	Date Time
3/12/2015	1315			3-12-15 1315
3-12-15	4:00			03/12/15 1600

Remarks:

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.

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

April 01, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1st Quarter-OW Wells OrderNo.: 1503425

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/10/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503425**
Date Reported: **4/1/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 8:00:00 AM
Lab ID: 1503425-001
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 8:00:00 AM
Lab ID: 1503425-001
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 1:21:56 AM	R24770
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770
Surr: Dibromofluoromethane	97.7	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770
Surr: Toluene-d8	92.9	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-29
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 9:15:00 AM
Lab ID: 1503425-002
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.063	0.0020		mg/L	1	3/12/2015 4:20:33 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:20:33 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:20:33 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:20:33 PM	R24791
Iron	0.31	0.020	*	mg/L	1	3/12/2015 4:20:33 PM	R24791
Manganese	0.31	0.0020	*	mg/L	1	3/12/2015 4:20:33 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:20:33 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:20:33 PM	R24791
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Barium	0.063	0.0020		mg/L	1	3/18/2015 6:47:20 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:47:20 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:47:20 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:47:20 PM	18191
Iron	0.41	0.020	*	mg/L	1	3/18/2015 6:47:20 PM	18191
Manganese	0.30	0.0020	*	mg/L	1	3/18/2015 6:47:20 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:47:20 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:47:20 PM	18191
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0010		mg/L	1	3/20/2015 4:49:13 PM	R24987
Lead	ND	0.0010		mg/L	1	3/20/2015 4:49:13 PM	R24987
Selenium	ND	0.010		mg/L	10	3/24/2015 6:05:27 PM	R25045
Uranium	0.053	0.0050	*	mg/L	5	3/23/2015 2:55:04 PM	R25015
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:42:23 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:00:48 PM	18191
Selenium	ND	0.0050		mg/L	5	3/24/2015 3:42:23 PM	18191
Uranium	0.061	0.0050	*	mg/L	5	3/24/2015 1:08:51 PM	18191
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:35:55 AM	18157
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Methyl tert-butyl ether (MTBE)	3200	50		µg/L	50	3/12/2015 11:01:33 AM	R24800
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-29
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 9:15:00 AM
Lab ID: 1503425-002
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-29
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 9:15:00 AM
Lab ID: 1503425-002
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 1:50:30 AM	R24770
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770
Surr: Toluene-d8	92.2	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770

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
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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-14
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 9:58:00 AM
Lab ID: 1503425-003
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	1.9	0.010		mg/L	5	3/12/2015 4:50:59 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:22:32 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:22:32 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:22:32 PM	R24791
Iron	4.7	0.10	*	mg/L	5	3/12/2015 4:50:59 PM	R24791
Manganese	2.2	0.010	*	mg/L	5	3/12/2015 4:50:59 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:22:32 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:22:32 PM	R24791
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	1.8	0.010		mg/L	5	3/19/2015 6:41:24 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:49:14 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:49:14 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:49:14 PM	18191
Iron	4.5	0.10	*	mg/L	5	3/19/2015 6:41:24 PM	18191
Manganese	2.1	0.010	*	mg/L	5	3/19/2015 6:41:24 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:49:14 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:49:14 PM	18191
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.020	*	mg/L	20	3/24/2015 6:08:30 PM	R25045
Lead	ND	0.0010		mg/L	1	3/20/2015 4:52:17 PM	R24987
Selenium	ND	0.020		mg/L	20	3/24/2015 6:08:30 PM	R25045
Uranium	0.0067	0.0010		mg/L	1	3/20/2015 4:52:17 PM	R24987
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.020	*	mg/L	20	3/25/2015 2:26:41 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:07:10 PM	18191
Selenium	ND	0.020		mg/L	20	3/25/2015 2:26:41 PM	18191
Uranium	0.0065	0.0010		mg/L	1	3/20/2015 12:07:10 PM	18191
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:37:42 AM	18157
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	3900	200		µg/L	200	3/12/2015 3:45:26 AM	R24770
Toluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Ethylbenzene	160	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Methyl tert-butyl ether (MTBE)	760	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,4-Trimethylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,3,5-Trimethylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-14
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 9:58:00 AM
Lab ID: 1503425-003
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Naphthalene	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
1-Methylnaphthalene	ND	80		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Methylnaphthalene	ND	80		µg/L	20	3/12/2015 4:14:10 AM	R24770
Acetone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromodichloromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromoform	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromomethane	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Butanone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Carbon disulfide	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Carbon Tetrachloride	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chloroethane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chloroform	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chloromethane	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Chlorotoluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
4-Chlorotoluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
cis-1,2-DCE	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
cis-1,3-Dichloropropene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Dibromochloromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Dibromomethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,3-Dichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,4-Dichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Dichlorodifluoromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1-Dichloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1-Dichloroethene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dichloropropane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,3-Dichloropropane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
2,2-Dichloropropane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1-Dichloropropene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Hexachlorobutadiene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Hexanone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Isopropylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
4-Isopropyltoluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
4-Methyl-2-pentanone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Methylene Chloride	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-14
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 9:58:00 AM
Lab ID: 1503425-003
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770
n-Propylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
sec-Butylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Styrene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
tert-Butylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Tetrachloroethene (PCE)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
trans-1,2-DCE	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
trans-1,3-Dichloropropene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,3-Trichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,4-Trichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,1-Trichloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,2-Trichloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Trichloroethene (TCE)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Trichlorofluoromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,3-Trichloropropane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Vinyl chloride	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Xylenes, Total	ND	30		µg/L	20	3/12/2015 4:14:10 AM	R24770
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770
Surr: Dibromofluoromethane	92.4	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770
Surr: Toluene-d8	92.1	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-13
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 11:45:00 AM
Lab ID: 1503425-004
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.020	0.0020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:24:14 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:24:14 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Manganese	0.022	0.0020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:24:14 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:24:14 PM	R24791
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Barium	0.020	0.0020		mg/L	1	3/18/2015 6:51:02 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:51:02 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:51:02 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:51:02 PM	18191
Iron	ND	0.020		mg/L	1	3/18/2015 6:51:02 PM	18191
Manganese	0.021	0.0020		mg/L	1	3/18/2015 6:51:02 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:51:02 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:51:02 PM	18191
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/23/2015 5:30:27 PM	R25015
Lead	ND	0.0010		mg/L	1	3/20/2015 4:55:20 PM	R24987
Selenium	ND	0.0050		mg/L	5	3/23/2015 5:30:27 PM	R25015
Uranium	0.017	0.0010		mg/L	1	3/20/2015 4:55:20 PM	R24987
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:48:46 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:16:48 PM	18191
Selenium	ND	0.0050		mg/L	5	3/24/2015 3:48:46 PM	18191
Uranium	0.017	0.0010		mg/L	1	3/20/2015 12:16:48 PM	18191
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:44:18 AM	18157
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Methyl tert-butyl ether (MTBE)	26	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-13
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 11:45:00 AM
Lab ID: 1503425-004
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-13
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 11:45:00 AM
Lab ID: 1503425-004
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 5:11:41 AM	R24770
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770
Surr: Toluene-d8	92.5	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-30
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 12:30:00 PM
Lab ID: 1503425-005
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.090	0.0020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:26:17 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:26:17 PM	R24791
Iron	0.064	0.020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Manganese	0.037	0.0020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:26:17 PM	R24791
Zinc	0.015	0.010		mg/L	1	3/12/2015 4:26:17 PM	R24791
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Barium	0.090	0.0020		mg/L	1	3/18/2015 6:53:07 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:53:07 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:53:07 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:53:07 PM	18191
Iron	0.089	0.020		mg/L	1	3/18/2015 6:53:07 PM	18191
Manganese	0.037	0.0020		mg/L	1	3/18/2015 6:53:07 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:53:07 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:53:07 PM	18191
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/24/2015 6:11:33 PM	R25045
Lead	ND	0.0010		mg/L	1	3/20/2015 4:58:23 PM	R24987
Selenium	ND	0.010		mg/L	10	3/24/2015 6:11:33 PM	R25045
Uranium	0.048	0.0010	*	mg/L	1	3/20/2015 4:58:23 PM	R24987
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	3/25/2015 2:29:52 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:19:59 PM	18191
Selenium	ND	0.010		mg/L	10	3/25/2015 2:29:52 PM	18191
Uranium	0.056	0.0050	*	mg/L	5	3/24/2015 1:21:36 PM	18191
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:46:06 AM	18157
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Methyl tert-butyl ether (MTBE)	4000	50		µg/L	50	3/12/2015 11:30:19 AM	R24800
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-30
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 12:30:00 PM
Lab ID: 1503425-005
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-30
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 12:30:00 PM
Lab ID: 1503425-005
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 5:40:24 AM	R24770
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770
Surr: Toluene-d8	94.2	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 2:45:00 PM
Lab ID: 1503425-006
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 10:04:14 AM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 10:04:14 AM	18082
Surr: DNOP	123	76.5-150		%REC	1	3/13/2015 10:04:14 AM	18082
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 10:41:29 AM	R24768
Surr: BFB	87.8	80-120		%REC	1	3/11/2015 10:41:29 AM	R24768
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	0.22	0.10		mg/L	1	3/11/2015 11:42:25 PM	R24785
Chloride	840	50		mg/L	100	3/17/2015 3:38:14 AM	R24864
Bromide	1.1	0.10		mg/L	1	3/11/2015 11:42:25 PM	R24785
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/11/2015 11:42:25 PM	R24785
Sulfate	200	10		mg/L	20	3/11/2015 11:54:49 PM	R24785
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/19/2015 4:19:39 AM	R24918
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.076	0.0020		mg/L	1	3/12/2015 4:33:51 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:33:51 PM	R24791
Calcium	130	10		mg/L	10	3/12/2015 4:58:38 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:33:51 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:33:51 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:33:51 PM	R24791
Magnesium	20	1.0		mg/L	1	3/12/2015 4:33:51 PM	R24791
Manganese	0.11	0.0020	*	mg/L	1	3/12/2015 4:33:51 PM	R24791
Potassium	3.2	1.0		mg/L	1	3/12/2015 4:33:51 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:33:51 PM	R24791
Sodium	730	10		mg/L	10	3/12/2015 4:58:38 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:33:51 PM	R24791
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Barium	0.067	0.0020		mg/L	1	3/18/2015 7:04:55 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 7:04:55 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 7:04:55 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 7:04:55 PM	18191
Iron	ND	0.020		mg/L	1	3/18/2015 7:04:55 PM	18191
Manganese	0.087	0.0020	*	mg/L	1	3/18/2015 7:04:55 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 7:04:55 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 7:04:55 PM	18191
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/23/2015 3:07:16 PM	R25015

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 2:45:00 PM
Lab ID: 1503425-006
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	3/20/2015 5:01:26 PM	R24987
Selenium	ND	0.050		mg/L	5	3/23/2015 3:07:16 PM	R25015
Uranium	0.057	0.0050	*	mg/L	5	3/23/2015 3:07:16 PM	R25015
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:51:58 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:23:11 PM	18191
Selenium	0.012	0.0050		mg/L	5	3/24/2015 3:51:58 PM	18191
Uranium	0.061	0.0050	*	mg/L	5	3/24/2015 1:24:47 PM	18191
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:47:55 AM	18157
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Methyl tert-butyl ether (MTBE)	61	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 2:45:00 PM
Lab ID: 1503425-006
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 6:37:52 AM	R24770
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 2:45:00 PM
Lab ID: 1503425-006
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770
Surr: Dibromofluoromethane	94.4	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770
Surr: Toluene-d8	98.8	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-01
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 4:15:00 PM
Lab ID: 1503425-007
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**BCN**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/12/2015 11:03:30 AM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 11:03:30 AM	18082
Surr: DNOP	120	76.5-150		%REC	1	3/12/2015 11:03:30 AM	18082
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 11:10:45 AM	R24768
Surr: BFB	84.8	80-120		%REC	1	3/11/2015 11:10:45 AM	R24768
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	0.23	0.10		mg/L	1	3/12/2015 12:32:04 AM	R24785
Chloride	67	10		mg/L	20	3/12/2015 12:44:28 AM	R24785
Bromide	0.28	0.10		mg/L	1	3/12/2015 12:32:04 AM	R24785
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/12/2015 12:32:04 AM	R24785
Sulfate	170	10		mg/L	20	3/12/2015 12:44:28 AM	R24785
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/19/2015 4:32:04 AM	R24918
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.034	0.0020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Calcium	2.2	1.0		mg/L	1	3/12/2015 4:35:50 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:35:50 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:35:50 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Magnesium	ND	1.0		mg/L	1	3/12/2015 4:35:50 PM	R24791
Manganese	0.0055	0.0020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Potassium	1.7	1.0		mg/L	1	3/12/2015 4:35:50 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:35:50 PM	R24791
Sodium	310	5.0		mg/L	5	3/12/2015 5:00:41 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:35:50 PM	R24791
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Barium	0.040	0.0020		mg/L	1	3/18/2015 7:06:53 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 7:06:53 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 7:06:53 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 7:06:53 PM	18191
Iron	0.54	0.020	*	mg/L	1	3/18/2015 7:06:53 PM	18191
Manganese	0.024	0.0020		mg/L	1	3/18/2015 7:06:53 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 7:06:53 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 7:06:53 PM	18191
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0010		mg/L	1	3/20/2015 5:04:29 PM	R24987

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-01
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 4:15:00 PM
Lab ID: 1503425-007
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	3/20/2015 5:04:29 PM	R24987
Selenium	0.0047	0.0010		mg/L	1	3/23/2015 3:10:20 PM	R25015
Uranium	0.039	0.0010	*	mg/L	1	3/20/2015 5:04:29 PM	R24987
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:55:09 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:26:22 PM	18191
Selenium	ND	0.0050		mg/L	5	3/24/2015 3:55:09 PM	18191
Uranium	0.042	0.0010	*	mg/L	1	3/20/2015 12:26:22 PM	18191
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:49:44 AM	18157
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-01
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 4:15:00 PM
Lab ID: 1503425-007
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 7:06:35 AM	R24770
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-01
Project: 2015 1st Quarter-OW Wells
Collection Date: 3/9/2015 4:15:00 PM
Lab ID: 1503425-007
Matrix: AQUEOUS
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770
Surr: Dibromofluoromethane	90.5	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770
Surr: Toluene-d8	94.2	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 1st Quarter-OW Wells
Collection Date:
Lab ID: 1503425-008
Matrix: TRIP BLANK
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 11:40:01 AM	R24768
Surr: BFB	86.8	80-120		%REC	1	3/11/2015 11:40:01 AM	R24768
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 1st Quarter-OW Wells
Collection Date:
Lab ID: 1503425-008
Matrix: TRIP BLANK
Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 7:35:17 AM	R24770
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770
Surr: Dibromofluoromethane	94.2	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770
Surr: Toluene-d8	93.5	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R24791** RunNo: **24791**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730236** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R24791** RunNo: **24791**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730237** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.2	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Calcium	54	1.0	50.00	0	108	85	115			
Chromium	0.50	0.0060	0.5000	0	99.4	85	115			
Copper	0.49	0.0060	0.5000	0	97.4	85	115			
Iron	0.49	0.020	0.5000	0	97.8	85	115			
Magnesium	54	1.0	50.00	0	107	85	115			
Manganese	0.49	0.0020	0.5000	0	97.0	85	115			
Potassium	51	1.0	50.00	0	101	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	53	1.0	50.00	0	105	85	115			
Zinc	0.49	0.010	0.5000	0	98.5	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R24791** RunNo: **24791**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730238** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R24791** RunNo: **24791**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730238** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R24791** RunNo: **24791**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730239** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.4	85	115			
Calcium	53	1.0	50.00	0	106	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.48	0.0060	0.5000	0	95.1	85	115			
Iron	0.48	0.020	0.5000	0	96.1	85	115			
Magnesium	53	1.0	50.00	0	105	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Sodium	52	1.0	50.00	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.3	85	115			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **MB-18191** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **18191** RunNo: **24914**
Prep Date: **3/17/2015** Analysis Date: **3/18/2015** SeqNo: **734029** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-18191** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **18191** RunNo: **24914**
Prep Date: **3/17/2015** Analysis Date: **3/18/2015** SeqNo: **734030** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	100	85	115			
Cadmium	0.51	0.0020	0.5000	0	101	85	115			
Chromium	0.51	0.0060	0.5000	0	102	85	115			
Copper	0.50	0.0060	0.5000	0	99.8	85	115			
Iron	0.51	0.020	0.5000	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	97.6	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.50	0.010	0.5000	0	99.7	85	115			

Sample ID **1503425-005CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **OW-30** Batch ID: **18191** RunNo: **24914**
Prep Date: **3/17/2015** Analysis Date: **3/18/2015** SeqNo: **734085** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.08970	95.0	70	130			
Cadmium	0.49	0.0020	0.5000	0	98.8	70	130			
Chromium	0.49	0.0060	0.5000	0	97.0	70	130			
Copper	0.53	0.0060	0.5000	0	106	70	130			
Iron	0.58	0.020	0.5000	0.08875	99.2	70	130			
Manganese	0.51	0.0020	0.5000	0.03702	93.7	70	130			
Silver	0.11	0.0050	0.1000	0	106	70	130			
Zinc	0.48	0.010	0.5000	0	95.2	70	130			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **1503425-005CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **OW-30** Batch ID: **18191** RunNo: **24914**
Prep Date: **3/17/2015** Analysis Date: **3/18/2015** SeqNo: **734086** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.08970	95.4	70	130	0.336	20	
Cadmium	0.49	0.0020	0.5000	0	98.4	70	130	0.410	20	
Chromium	0.49	0.0060	0.5000	0	97.5	70	130	0.518	20	
Copper	0.53	0.0060	0.5000	0	106	70	130	0.124	20	
Iron	0.58	0.020	0.5000	0.08875	99.2	70	130	0.0581	20	
Manganese	0.51	0.0020	0.5000	0.03702	94.1	70	130	0.395	20	
Silver	0.11	0.0050	0.1000	0	107	70	130	1.07	20	
Zinc	0.48	0.010	0.5000	0	95.5	70	130	0.312	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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R24987** RunNo: **24987**
Prep Date: Analysis Date: **3/20/2015** SeqNo: **736812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.6	85	115			
Lead	0.025	0.0010	0.02500	0	99.6	85	115			
Uranium	0.025	0.0010	0.02500	0	99.7	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R24987** RunNo: **24987**
Prep Date: Analysis Date: **3/20/2015** SeqNo: **736813** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	93.4	85	115			
Lead	0.024	0.0010	0.02500	0	96.5	85	115			
Uranium	0.024	0.0010	0.02500	0	96.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R24987** RunNo: **24987**
Prep Date: Analysis Date: **3/20/2015** SeqNo: **736814** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R24987** RunNo: **24987**
Prep Date: Analysis Date: **3/20/2015** SeqNo: **736815** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25015** RunNo: **25015**
Prep Date: Analysis Date: **3/23/2015** SeqNo: **737627** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25015** RunNo: **25015**
Prep Date: Analysis Date: **3/23/2015** SeqNo: **737628** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Selenium	0.024	0.0010	0.02500	0	95.3	85	115			
Uranium	0.024	0.0010	0.02500	0	96.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25015** RunNo: **25015**
Prep Date: Analysis Date: **3/23/2015** SeqNo: **737629** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25015** RunNo: **25015**
Prep Date: Analysis Date: **3/23/2015** SeqNo: **737630** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R25045** RunNo: **25045**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738857** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.3	85	115			
Selenium	0.023	0.0010	0.02500	0	93.7	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R25045** RunNo: **25045**
Prep Date: Analysis Date: **3/24/2015** SeqNo: **738858** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **1503425-002CMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **OW-29** Batch ID: **18191** RunNo: **24951**
Prep Date: **3/17/2015** Analysis Date: **3/20/2015** SeqNo: **735444** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.026	0.0010	0.02500	.00009102	103	70	130			

Sample ID **LLLCS-18191** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **18191** RunNo: **24951**
Prep Date: **3/17/2015** Analysis Date: **3/20/2015** SeqNo: **735454** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	103	85	115			
Selenium	0.024	0.0010	0.02500	0	95.7	85	115			
Uranium	0.026	0.0010	0.02500	0	105	85	115			

Sample ID **MB-18191** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **18191** RunNo: **24951**
Prep Date: **3/17/2015** Analysis Date: **3/20/2015** SeqNo: **735456** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **1503425-002CMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **OW-29** Batch ID: **18191** RunNo: **25044**
Prep Date: **3/17/2015** Analysis Date: **3/24/2015** SeqNo: **738793** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.087	0.0050	0.02500	0.06074	105	70	130			

Sample ID **1503425-002CMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **OW-29** Batch ID: **18191** RunNo: **25044**
Prep Date: **3/17/2015** Analysis Date: **3/24/2015** SeqNo: **738794** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0050	0.02500	0	103	70	130			
Selenium	0.027	0.0050	0.02500	0.004022	92.0	70	130			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID	**MB-18157**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**18157**	RunNo:	**24865**
Prep Date:	**3/16/2015**	Analysis Date:	**3/17/2015**	SeqNo:	**732488** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-18157**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**18157**	RunNo:	**24865**
Prep Date:	**3/16/2015**	Analysis Date:	**3/17/2015**	SeqNo:	**732489** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	101	80	120			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R24785** RunNo: **24785**
Prep Date: Analysis Date: **3/11/2015** SeqNo: **730087** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R24785** RunNo: **24785**
Prep Date: Analysis Date: **3/11/2015** SeqNo: **730088** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.2	90	110			
Chloride	4.9	0.50	5.000	0	97.9	90	110			
Bromide	2.5	0.10	2.500	0	99.1	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	96.1	90	110			
Sulfate	9.7	0.50	10.00	0	96.7	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R24785** RunNo: **24785**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730141** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R24785** RunNo: **24785**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730142** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.2	90	110			
Chloride	4.7	0.50	5.000	0	93.5	90	110			
Bromide	2.4	0.10	2.500	0	95.7	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.4	90	110			
Sulfate	9.3	0.50	10.00	0	93.3	90	110			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R24864** RunNo: **24864**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732383** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R24864** RunNo: **24864**
Prep Date: Analysis Date: **3/16/2015** SeqNo: **732384** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.5	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R24918** RunNo: **24918**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **734196** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R24918** RunNo: **24918**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **734197** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.7	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R24918** RunNo: **24918**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **734251** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R24918** RunNo: **24918**
Prep Date: Analysis Date: **3/18/2015** SeqNo: **734252** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0	103	90	110			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **MB-18082** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW** Batch ID: **18082** RunNo: **24775**
Prep Date: **3/11/2015** Analysis Date: **3/12/2015** SeqNo: **729760** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		122	76.5	150			

Sample ID **LCS-18082** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **18082** RunNo: **24774**
Prep Date: **3/11/2015** Analysis Date: **3/12/2015** SeqNo: **729945** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.8	1.0	5.000	0	117	60.1	156			
Surr: DNOP	0.67		0.5000		134	76.5	150			

Sample ID **1503425-006CMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **OW-10** Batch ID: **18082** RunNo: **24775**
Prep Date: **3/11/2015** Analysis Date: **3/12/2015** SeqNo: **730049** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	1.779	79.2	75.9	164			
Surr: DNOP	0.60		0.5000		120	76.5	150			

Sample ID **1503425-006CMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **OW-10** Batch ID: **18082** RunNo: **24775**
Prep Date: **3/11/2015** Analysis Date: **3/12/2015** SeqNo: **730050** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	7.5	1.0	5.000	1.779	114	75.9	164	26.6	22.1	R
Surr: DNOP	0.56		0.5000		112	76.5	150	0	0	

Sample ID **LCS-18082** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW** Batch ID: **18082** RunNo: **24775**
Prep Date: **3/11/2015** Analysis Date: **3/12/2015** SeqNo: **730644** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.5	1.0	5.000	0	130	60.1	156			
Surr: DNOP	0.60		0.5000		121	76.5	150			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBW**	Batch ID:	**R24768**	RunNo:	**24768**
Prep Date:		Analysis Date:	**3/11/2015**	SeqNo:	**729569** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.9	80	120			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSW**	Batch ID:	**R24768**	RunNo:	**24768**
Prep Date:		Analysis Date:	**3/11/2015**	SeqNo:	**729570** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	87.2	80	120			
Surr: BFB	20		20.00		101	80	120			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R24770**	RunNo: **24770**			
Prep Date:	Analysis Date: **3/11/2015**	SeqNo: **729597**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24770** RunNo: **24770**
Prep Date: Analysis Date: **3/11/2015** SeqNo: **729597** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24770** RunNo: **24770**
Prep Date: Analysis Date: **3/11/2015** SeqNo: **729601** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	19	1.0	20.00	0	97.0	70	130			
Chlorobenzene	20	1.0	20.00	0	97.7	70	130			

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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24770** RunNo: **24770**
Prep Date: Analysis Date: **3/11/2015** SeqNo: **729601** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	98.7	75.6	144			
Trichloroethene (TCE)	17	1.0	20.00	0	87.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID **1503425-002a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **OW-29** Batch ID: **R24770** RunNo: **24770**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **729629** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	97.4	70	130			
Chlorobenzene	19	1.0	20.00	0	93.6	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	79.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID **1503425-002a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **OW-29** Batch ID: **R24770** RunNo: **24770**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **729630** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.8	70	130	8.32	20	
Toluene	18	1.0	20.00	0	92.1	70	130	5.59	20	
Chlorobenzene	19	1.0	20.00	0	93.3	70	130	0.383	20	
1,1-Dichloroethene	19	1.0	20.00	0	97.2	70	130	6.88	20	
Trichloroethene (TCE)	15	1.0	20.00	0	73.0	70	130	8.98	20	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		99.8	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		95.6	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 Not In Range
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#: **1503425**
01-Apr-15

Client: Western Refining Southwest, Gallup
Project: 2015 1st Quarter-OW Wells

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R24800** RunNo: **24800**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730443** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.5	70	130			
Surr: Toluene-d8	9.3		10.00		92.9	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R24800** RunNo: **24800**
Prep Date: Analysis Date: **3/12/2015** SeqNo: **730445** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	9.1		10.00		91.5	70	130			

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1503425 RcptNo: 1

Received by/date: CS 03/10/2015

Logged By: Ashley Gallegos 3/10/2015 4:00:00 PM

Completed By: Ashley Gallegos 3/11/2015 8:36:28 AM

Reviewed By: 03/11/15

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 14 (<2 or >12 unless noted)
Adjusted? No
Checked by: MJ

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			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

? Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type)_____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

2015 1st QUARTER - OW Wells

Project #:

PO #20825207

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503425	8260+MTBE	WQCC Metals - Total	WQCC Metals - Dissolved - Filtered	Major Cations/Anions	8015B								Air Bubbles (Y or N)
3/9/2015	800	aqueous	FIELD BLANK			-001	X												
3/9/2015	915	aqueous	OW-29			-002	X	X	X										
3/9/2015	958	aqueous	OW-14			-003	X	X	X										
3/9/2015	1145	aqueous	OW-13			-004	X	X	X										
3/9/2015	1230	aqueous	OW-30			-005	X	X	X										
3/9/2015	1445	aqueous	OW-10			-006	X	X	X	X	X								
3/9/2015	1615	aqueous	OW-01			-007	X	X	X	X	X								
3/9/2015		aqueous	TRIP BLANK			-008	X												

Date	Time	Relinquished by	Received by	Date	Time
3/10/2015	1230	[signature]	[signature]	3/10/15	1:15
3-10-15	4:00	[signature]	Celina Sanchez	03/10/15	1600

Remarks:

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.

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

June 24, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd Quarter-OW Wells OrderNo.: 1506184

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/3/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 7:00:00 AM
Lab ID: 1506184-001
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Field Blank
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 7:00:00 AM
Lab ID: 1506184-001
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 5:49:53 AM	R26716
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716
Surr: Dibromofluoromethane	98.9	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716
Surr: Toluene-d8	97.2	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506184-002
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 5:47:18 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:47:18 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 5:47:18 PM	R26876
Uranium	0.041	0.010	*	mg/L	10	6/16/2015 5:47:18 PM	R26876
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	ND	0.50		mg/L	5	6/5/2015 4:29:45 PM	R26681
Chloride	77	2.5		mg/L	5	6/5/2015 4:29:45 PM	R26681
Bromide	ND	0.50		mg/L	5	6/5/2015 4:29:45 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	6/5/2015 4:29:45 PM	R26681
Sulfate	190	2.5		mg/L	5	6/5/2015 4:29:45 PM	R26681
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/5/2015 8:37:58 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.033	0.0020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Calcium	2.0	1.0		mg/L	1	6/15/2015 6:36:25 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 6:36:25 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 6:36:25 PM	R26842
Iron	ND	0.020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Magnesium	ND	1.0		mg/L	1	6/15/2015 6:36:25 PM	R26842
Manganese	0.0060	0.0020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Potassium	ND	1.0		mg/L	1	6/15/2015 6:36:25 PM	R26842
Silver	ND	0.0050		mg/L	1	6/16/2015 3:24:53 PM	R26882
Sodium	300	5.0		mg/L	5	6/15/2015 6:38:30 PM	R26842
Zinc	0.034	0.010		mg/L	1	6/15/2015 6:36:25 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.047	0.0020		mg/L	1	6/9/2015 2:21:38 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:21:38 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:21:38 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 2:21:38 PM	19599
Iron	1.0	0.10	*	mg/L	5	6/10/2015 3:35:36 PM	19599
Manganese	0.050	0.0020		mg/L	1	6/9/2015 2:21:38 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 2:21:38 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 2:21:38 PM	19599
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:18:38 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 1:18:38 PM	19599
Selenium	ND	0.010		mg/L	10	6/16/2015 1:18:38 PM	19599

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506184-002
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Uranium	0.042	0.0050	*	mg/L	10	6/16/2015 1:18:38 PM	19599
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/5/2015 3:00:25 PM	19589
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/9/2015 7:35:07 AM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 7:35:07 AM	19569
Surr: DNOP	89.9	76.5-150		%REC	1	6/9/2015 7:35:07 AM	19569
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/8/2015 7:14:28 PM	R26688
Surr: BFB	90.4	57.8-137		%REC	1	6/8/2015 7:14:28 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506184-002
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506184-002
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Phenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Surr: 2-Fluorophenol	65.0	14.9-111		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: Phenol-d5	58.7	11.3-108		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: 2,4,6-Tribromophenol	82.8	15.7-154		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: Nitrobenzene-d5	81.3	47.8-106		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: 2-Fluorobiphenyl	75.6	21.3-123		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: 4-Terphenyl-d14	59.9	14.3-135		%REC	1	6/9/2015 2:31:22 PM	19583
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506184-002
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 6:17:34 AM	R26716

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 10:15:00 AM
Lab ID: 1506184-002
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716
Surr: Dibromofluoromethane	98.6	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716
Surr: Toluene-d8	96.0	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 11:30:00 AM
Lab ID: 1506184-003
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 5:50:21 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:50:21 PM	R26876
Selenium	0.014	0.010		mg/L	10	6/16/2015 5:50:21 PM	R26876
Uranium	0.059	0.010	*	mg/L	10	6/16/2015 5:50:21 PM	R26876
EPA METHOD 300.0: ANIONS						Analyst:	**LGT**
Fluoride	ND	0.50		mg/L	5	6/5/2015 4:54:34 PM	R26681
Chloride	1500	50		mg/L	100	6/9/2015 10:59:59 PM	R26721
Bromide	1.6	0.50		mg/L	5	6/5/2015 4:54:34 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	6/5/2015 4:54:34 PM	R26681
Sulfate	240	2.5		mg/L	5	6/5/2015 4:54:34 PM	R26681
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/5/2015 8:50:22 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.074	0.0020		mg/L	1	6/15/2015 6:40:19 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:40:19 PM	R26842
Calcium	100	5.0		mg/L	5	6/15/2015 6:42:15 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 6:40:19 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 6:40:19 PM	R26842
Iron	ND	0.020		mg/L	1	6/15/2015 6:40:19 PM	R26842
Magnesium	18	1.0		mg/L	1	6/15/2015 6:40:19 PM	R26842
Manganese	0.075	0.0020	*	mg/L	1	6/15/2015 6:40:19 PM	R26842
Potassium	1.4	1.0		mg/L	1	6/15/2015 6:40:19 PM	R26842
Silver	ND	0.0050		mg/L	1	6/16/2015 3:26:53 PM	R26882
Sodium	660	10		mg/L	10	6/16/2015 3:28:48 PM	R26882
Zinc	0.010	0.010		mg/L	1	6/15/2015 6:40:19 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.095	0.0020		mg/L	1	6/9/2015 2:23:41 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:23:41 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:23:41 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 2:23:41 PM	19599
Iron	ND	0.020		mg/L	1	6/9/2015 2:23:41 PM	19599
Manganese	0.15	0.0020	*	mg/L	1	6/9/2015 2:23:41 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 2:23:41 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 2:23:41 PM	19599
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:24:07 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 1:24:07 PM	19599
Selenium	ND	0.020		mg/L	20	6/16/2015 2:35:00 PM	19599

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 11:30:00 AM
Lab ID: 1506184-003
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Uranium	0.063	0.0050	*	mg/L	10	6/16/2015 1:24:07 PM	19599
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/5/2015 3:02:27 PM	19589
EPA METHOD 8015D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/9/2015 7:56:25 AM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 7:56:25 AM	19569
Surr: DNOP	96.2	76.5-150		%REC	1	6/9/2015 7:56:25 AM	19569
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	0.067	0.050		mg/L	1	6/8/2015 7:39:47 PM	R26688
Surr: BFB	94.2	57.8-137		%REC	1	6/8/2015 7:39:47 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Acenaphthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 11:30:00 AM
Lab ID: 1506184-003
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 11:30:00 AM
Lab ID: 1506184-003
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	**DAM**
Phenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Surr: 2-Fluorophenol	43.8	14.9-111		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: Phenol-d5	55.9	11.3-108		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: 2,4,6-Tribromophenol	66.2	15.7-154		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: Nitrobenzene-d5	79.0	47.8-106		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: 2-Fluorobiphenyl	71.8	21.3-123		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: 4-Terphenyl-d14	60.9	14.3-135		%REC	1	6/9/2015 2:59:11 PM	19583
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Methyl tert-butyl ether (MTBE)	55	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 11:30:00 AM
Lab ID: 1506184-003
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 6:45:18 AM	R26716

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015 11:30:00 AM
Lab ID: 1506184-003
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716
Surr: Toluene-d8	104	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015
Lab ID: 1506184-004
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Blind Duplicate
Project: 2015 2nd Quarter-OW Wells
Collection Date: 6/3/2015
Lab ID: 1506184-004
Matrix: AQUEOUS
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Surr: 2-Fluorophenol	35.5	14.9-111		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: Phenol-d5	41.4	11.3-108		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: 2,4,6-Tribromophenol	67.3	15.7-154		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: Nitrobenzene-d5	58.8	47.8-106		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: 2-Fluorobiphenyl	67.6	21.3-123		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: 4-Terphenyl-d14	65.4	14.3-135		%REC	1	6/9/2015 3:27:09 PM	19583

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 2nd Quarter-OW Wells
Collection Date:
Lab ID: 1506184-005
Matrix: TRIP BLANK
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/8/2015 11:27:02 PM	R26688
Surr: BFB	88.4	57.8-137		%REC	1	6/8/2015 11:27:02 PM	R26688
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: 2015 2nd Quarter-OW Wells
Collection Date:
Lab ID: 1506184-005
Matrix: TRIP BLANK
Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 7:12:58 AM	R26716
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716
Surr: Dibromofluoromethane	92.3	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716
Surr: Toluene-d8	101	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **800962** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **800963** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Calcium	49	1.0	50.00	0	98.7	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.48	0.020	0.5000	0	95.8	85	115			
Magnesium	50	1.0	50.00	0	99.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.8	85	115			
Potassium	49	1.0	50.00	0	98.6	85	115			
Sodium	48	1.0	50.00	0	96.7	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801190** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801190** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801191** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Calcium	52	1.0	50.00	0	104	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Magnesium	52	1.0	50.00	0	105	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			
Potassium	51	1.0	50.00	0	102	85	115			
Sodium	52	1.0	50.00	0	103	85	115			
Zinc	0.47	0.010	0.5000	0	94.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26882** RunNo: **26882**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802272** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26882** RunNo: **26882**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802273** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			
Sodium	49	1.0	50.00	0	97.8	85	115			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **MB-19599** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **19599** RunNo: **26704**
Prep Date: **6/6/2015** Analysis Date: **6/9/2015** SeqNo: **795801** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-19599** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **19599** RunNo: **26704**
Prep Date: **6/6/2015** Analysis Date: **6/9/2015** SeqNo: **795802** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Cadmium	0.53	0.0020	0.5000	0	106	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.49	0.020	0.5000	0	98.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.3	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802096** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802101** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **LCSLL-19599** SampType: **LCSLL** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **BatchQC** Batch ID: **19599** RunNo: **26682**
Prep Date: **6/6/2015** Analysis Date: **6/8/2015** SeqNo: **794999** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.2	85	115			
Lead	0.012	0.00050	0.01250	0	99.9	85	115			
Selenium	0.023	0.0010	0.02500	0	93.3	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID **MB-19599** SampType: **MBLK** TestCode: **200.8 ICPMS Metals:Total**
Client ID: **PBW** Batch ID: **19599** RunNo: **26682**
Prep Date: **6/6/2015** Analysis Date: **6/8/2015** SeqNo: **795000** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID	**MB-19589**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**19589**	RunNo:	**26652**
Prep Date:	**6/5/2015**	Analysis Date:	**6/5/2015**	SeqNo:	**793971** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-19589**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**19589**	RunNo:	**26652**
Prep Date:	**6/5/2015**	Analysis Date:	**6/5/2015**	SeqNo:	**793972** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.2	80	120			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R26681** RunNo: **26681**
Prep Date: Analysis Date: **6/5/2015** SeqNo: **794808** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R26681** RunNo: **26681**
Prep Date: Analysis Date: **6/5/2015** SeqNo: **794872** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R26681** RunNo: **26681**
Prep Date: Analysis Date: **6/6/2015** SeqNo: **794873** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.1	90	110			
Chloride	4.6	0.50	5.000	0	91.6	90	110			
Bromide	2.4	0.10	2.500	0	94.5	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	94.5	90	110			
Sulfate	9.4	0.50	10.00	0	94.1	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.3	90	110			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R26721** RunNo: **26721**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796475** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**			
Client ID: **LCSW**	Batch ID: **R26721**	RunNo: **26721**			
Prep Date:	Analysis Date: **6/9/2015**	SeqNo: **796476**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.1	0.50	5.000	0	103	90	110			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID	**MB-19569**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range**		
Client ID:	**PBW**	Batch ID:	**19569**	RunNo:	**26673**		
Prep Date:	**6/4/2015**	Analysis Date:	**6/8/2015**	SeqNo:	**795204**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID	**LCS-19569**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range**		
Client ID:	**LCSW**	Batch ID:	**19569**	RunNo:	**26673**		
Prep Date:	**6/4/2015**	Analysis Date:	**6/8/2015**	SeqNo:	**795205**	Units:	**mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.9	60.1	156			
Surr: DNOP	0.33		0.5000		66.9	76.5	150			S

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R26688** RunNo: **26688**
Prep Date: Analysis Date: **6/8/2015** SeqNo: **795136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.0	57.8	137			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R26688** RunNo: **26688**
Prep Date: Analysis Date: **6/8/2015** SeqNo: **795137** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.0	80	120			
Surr: BFB	20		20.00		100	57.8	137			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R26716**	RunNo: **26716**			
Prep Date:	Analysis Date: **6/9/2015**	SeqNo: **796185**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **5ml rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26716** RunNo: **26716**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796185** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **100nglcs,200ngT2st** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26716** RunNo: **26716**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796187** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.5	70	130			
Toluene	19	1.0	20.00	0	94.7	70	130			
Chlorobenzene	18	1.0	20.00	0	90.3	70	130			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **100nglcs,200ngT2st** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26716** RunNo: **26716**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796187** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	108	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	90.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26716** RunNo: **26716**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796233** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **b3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R26716**	RunNo: **26716**	
Prep Date:	Analysis Date: **6/9/2015**	SeqNo: **796233**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **b3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26716** RunNo: **26716**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796233** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26716** RunNo: **26716**
Prep Date: Analysis Date: **6/9/2015** SeqNo: **796235** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **mb-19583**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **19583**	RunNo: **26697**			
Prep Date: **6/5/2015**	Analysis Date: **6/9/2015**	SeqNo: **795540**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **mb-19583**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **19583**	RunNo: **26697**			
Prep Date: **6/5/2015**	Analysis Date: **6/9/2015**	SeqNo: **795540**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	110		200.0		53.6	14.9	111			
Surr: Phenol-d5	120		200.0		59.4	11.3	108			
Surr: 2,4,6-Tribromophenol	130		200.0		66.3	15.7	154			
Surr: Nitrobenzene-d5	62		100.0		61.7	47.8	106			
Surr: 2-Fluorobiphenyl	61		100.0		61.0	21.3	123			
Surr: 4-Terphenyl-d14	65		100.0		65.3	14.3	135			

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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID **lcs-19583** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **19583** RunNo: **26697**
Prep Date: **6/5/2015** Analysis Date: **6/9/2015** SeqNo: **795541** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.0	47.8	99.7			
4-Chloro-3-methylphenol	130	10	200.0	0	65.4	58.1	103			
2-Chlorophenol	110	10	200.0	0	55.9	49.5	96.8			
1,4-Dichlorobenzene	53	10	100.0	0	52.7	40.4	89.4			
2,4-Dinitrotoluene	59	10	100.0	0	59.4	38.6	91.3			
N-Nitrosodi-n-propylamine	63	10	100.0	0	62.9	53.9	95.6			
4-Nitrophenol	120	10	200.0	0	60.7	26.4	108			
Pentachlorophenol	120	20	200.0	0	58.6	36.5	86.6			
Phenol	110	10	200.0	0	53.8	29.3	108			
Pyrene	67	10	100.0	0	67.2	45.7	100			
1,2,4-Trichlorobenzene	55	10	100.0	0	54.9	39.3	94.5			
Surr: 2-Fluorophenol	97		200.0		48.6	14.9	111			
Surr: Phenol-d5	110		200.0		57.2	11.3	108			
Surr: 2,4,6-Tribromophenol	140		200.0		70.8	15.7	154			
Surr: Nitrobenzene-d5	56		100.0		56.1	47.8	106			
Surr: 2-Fluorobiphenyl	53		100.0		53.4	21.3	123			
Surr: 4-Terphenyl-d14	63		100.0		62.6	14.3	135			

Sample ID **lcsd-19583** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **19583** RunNo: **26697**
Prep Date: **6/5/2015** Analysis Date: **6/9/2015** SeqNo: **795542** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	81	10	100.0	0	81.4	47.8	99.7	28.7	28.2	R
4-Chloro-3-methylphenol	160	10	200.0	0	78.7	58.1	103	18.5	24.4	
2-Chlorophenol	150	10	200.0	0	72.7	49.5	96.8	26.1	28.1	
1,4-Dichlorobenzene	66	10	100.0	0	66.2	40.4	89.4	22.8	31.2	
2,4-Dinitrotoluene	68	10	100.0	0	67.9	38.6	91.3	13.4	44.4	
N-Nitrosodi-n-propylamine	73	10	100.0	0	72.8	53.9	95.6	14.6	24.2	
4-Nitrophenol	150	10	200.0	0	75.4	26.4	108	21.5	36.6	
Pentachlorophenol	140	20	200.0	0	71.7	36.5	86.6	20.2	29.5	
Phenol	140	10	200.0	0	69.4	29.3	108	25.4	30	
Pyrene	74	10	100.0	0	73.8	45.7	100	9.39	31	
1,2,4-Trichlorobenzene	76	10	100.0	0	76.1	39.3	94.5	32.2	24	R
Surr: 2-Fluorophenol	130		200.0		65.3	14.9	111	0	0	
Surr: Phenol-d5	150		200.0		74.0	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	180		200.0		91.8	15.7	154	0	0	
Surr: Nitrobenzene-d5	76		100.0		76.5	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	77		100.0		77.5	21.3	123	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 Not In Range
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#: **1506184**
24-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter-OW Wells

Sample ID	**lcsd-19583**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**19583**	RunNo:	**26697**
Prep Date:	**6/5/2015**	Analysis Date:	**6/9/2015**	SeqNo:	**795542** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	63		100.0		63.3	14.3	135	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1506184** RcptNo: 1

Received by/date: CS 06/03/15

Logged By: **Ashley Gallegos** **6/3/2015 4:07:00 PM**

Completed By: **Ashley Gallegos** **6/4/2015 7:25:18 AM**

Reviewed By: 06/04/15

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° 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? Yes ☑ No ☐ # of preserved bottles checked for pH: 6
    (Note discrepancies on chain of custody) (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted? NO
14. Is it clear what analyses were requested? Yes ☑ No ☐
15. Were all holding times able to be met? Yes ☑ No ☐ Checked by:
    (If no, notify customer for authorization.)

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	2.3	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

? Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 2nd QUARTER - OW Wells

Project #:

PO #20825207

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.3°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1506184	8260+MTBE	WQCC Metals - Total	WQCC Metals - Dissolved - Filtered	Major Cations/Anions	8015B	8270								Air Bubbles (Y or N)
6/3/2015	700	aqueous	FIELD BLANK	3-40ML VOAS	HCL	-001	X													
6/3/2015	1015	aqueous	OW-1	Misc	Misc	-002	X	X	X	X	X	X								
6/3/2015	1130	aqueous	OW-10	Misc	Misc	-003	X	X	X	X	X	X								
6/3/2015		aqueous	BLIND DUPLICATE	1L Amber	None	-004	X	X	X	X	X	X								
6/3/2015			Trip Blank	3-40 ml VOAS	HCL	-005	X													

Date	Time	Relinquished by	Received by	Date	Time
6/3/15	1335			6/3/15	1335
6-3-15	1607		Celina Sanz	06/03/15	1607

Remarks:

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.

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

June 29, 2015

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd Quarter MKTF WELLS OrderNo.: 1506309

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 6/6/2015 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FIELD BLANK
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 7:00:00 AM
Lab ID: 1506309-001
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Toluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Ethylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Naphthalene	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1-Methylnaphthalene	ND	4.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Methylnaphthalene	ND	4.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Acetone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromodichloromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromoform	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromomethane	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Butanone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Carbon disulfide	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Carbon Tetrachloride	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chloroethane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chloroform	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chloromethane	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Chlorotoluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
4-Chlorotoluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
cis-1,2-DCE	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Dibromochloromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Dibromomethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1-Dichloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1-Dichloroethene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dichloropropane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,3-Dichloropropane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2,2-Dichloropropane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FIELD BLANK
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 7:00:00 AM
Lab ID: 1506309-001
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Hexachlorobutadiene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Hexanone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Isopropylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
4-Isopropyltoluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
4-Methyl-2-pentanone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Methylene Chloride	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
n-Butylbenzene	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
n-Propylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
sec-Butylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Styrene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
tert-Butylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
trans-1,2-DCE	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Trichlorofluoromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Vinyl chloride	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Xylenes, Total	ND	1.5		µg/L	1	6/13/2015 6:35:19 AM	R26816
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816
Surr: Dibromofluoromethane	102	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816
Surr: Toluene-d8	97.7	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:05:00 AM
Lab ID: 1506309-002
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.31	0.0020		mg/L	1	6/15/2015 7:14:27 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:14:27 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:14:27 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:14:27 PM	R26842
Iron	1.9	0.10	*	mg/L	5	6/15/2015 7:16:11 PM	R26842
Manganese	3.2	0.010	*	mg/L	5	6/15/2015 7:16:11 PM	R26842
Silver	ND	0.0050		mg/L	1	6/17/2015 5:36:11 PM	R26895
Zinc	0.012	0.010		mg/L	1	6/15/2015 7:14:27 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.34	0.0020		mg/L	1	6/11/2015 6:29:05 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:29:05 PM	19666
Chromium	ND	0.0060		mg/L	1	6/11/2015 6:29:05 PM	19666
Copper	ND	0.0060		mg/L	1	6/15/2015 5:06:00 PM	19666
Iron	3.1	0.10	*	mg/L	5	6/11/2015 6:30:54 PM	19666
Manganese	3.0	0.010	*	mg/L	5	6/11/2015 6:30:54 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:06:00 PM	19666
Zinc	ND	0.010		mg/L	1	6/11/2015 6:29:05 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/16/2015 2:10:26 PM	19666
Lead	ND	0.0025		mg/L	5	6/16/2015 2:10:26 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:10:26 PM	19666
Uranium	0.0076	0.0025		mg/L	5	6/16/2015 2:10:26 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:23:26 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	1.8	1.0		mg/L	1	6/9/2015 6:57:04 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 6:57:04 PM	19616
Surr: DNOP	98.0	76.5-150		%REC	1	6/9/2015 6:57:04 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	4.1	0.25		mg/L	5	6/9/2015 12:42:57 AM	R26688
Surr: BFB	110	57.8-137		%REC	5	6/9/2015 12:42:57 AM	R26688

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:05:00 AM
Lab ID: 1506309-002
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Aniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Carbazole	10	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:05:00 AM
Lab ID: 1506309-002
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1-Methylnaphthalene	36	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Naphthalene	12	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Phenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Surr: 2-Fluorophenol	53.0	14.9-111		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: Phenol-d5	61.8	11.3-108		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: 2,4,6-Tribromophenol	82.1	15.7-154		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: Nitrobenzene-d5	91.0	47.8-106		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: 2-Fluorobiphenyl	84.8	21.3-123		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: 4-Terphenyl-d14	92.2	14.3-135		%REC	1	6/10/2015 11:44:31 AM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:05:00 AM
Lab ID: 1506309-002
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	890	50		µg/L	50	6/15/2015 2:23:44 PM	R26844
Toluene	25	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Ethylbenzene	150	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Methyl tert-butyl ether (MTBE)	430	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,4-Trimethylbenzene	33	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Naphthalene	15	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
1-Methylnaphthalene	51	20		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Methylnaphthalene	ND	20		µg/L	5	6/13/2015 7:04:10 AM	R26816
Acetone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromodichloromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromoform	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromomethane	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Butanone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Carbon disulfide	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Carbon Tetrachloride	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chloroethane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chloroform	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chloromethane	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Chlorotoluene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
4-Chlorotoluene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
cis-1,2-DCE	30	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Dibromochloromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Dibromomethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1-Dichloroethane	28	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1-Dichloroethene	55	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dichloropropane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,3-Dichloropropane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
2,2-Dichloropropane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-9
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:05:00 AM
Lab ID: 1506309-002
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Hexachlorobutadiene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Hexanone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Isopropylbenzene	15	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
4-Isopropyltoluene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
4-Methyl-2-pentanone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Methylene Chloride	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
n-Butylbenzene	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
n-Propylbenzene	22	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
sec-Butylbenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Styrene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
tert-Butylbenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Tetrachloroethene (PCE)	7.8	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
trans-1,2-DCE	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,1-Trichloroethane	67	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Trichloroethene (TCE)	7.6	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Trichlorofluoromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,3-Trichloropropane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Vinyl chloride	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Xylenes, Total	39	7.5		µg/L	5	6/13/2015 7:04:10 AM	R26816
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816
Surr: 4-Bromofluorobenzene	85.0	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816
Surr: Dibromofluoromethane	93.5	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816
Surr: Toluene-d8	104	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:35:00 AM
Lab ID: 1506309-003
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	12	0.040	*	mg/L	20	6/18/2015 5:30:35 PM	R26942
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:25:22 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:25:22 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:25:22 PM	R26842
Iron	53	2.0	*	mg/L	100	6/18/2015 5:32:31 PM	R26942
Manganese	18	0.040	*	mg/L	20	6/18/2015 5:30:35 PM	R26942
Silver	ND	0.0050		mg/L	1	6/15/2015 7:25:22 PM	R26842
Zinc	0.034	0.010		mg/L	1	6/15/2015 7:25:22 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	19	0.10	*	mg/L	50	6/15/2015 5:09:50 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:33:01 PM	19666
Chromium	0.077	0.0060		mg/L	1	6/11/2015 6:33:01 PM	19666
Copper	0.10	0.0060		mg/L	1	6/15/2015 5:07:41 PM	19666
Iron	120	10	*	mg/L	500	6/15/2015 5:11:38 PM	19666
Manganese	24	0.10	*	mg/L	50	6/15/2015 5:09:50 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:07:41 PM	19666
Zinc	0.15	0.010		mg/L	1	6/11/2015 6:33:01 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.015	0.0050	*	mg/L	5	6/16/2015 2:18:40 PM	19666
Lead	0.19	0.0025	*	mg/L	5	6/16/2015 2:18:40 PM	19666
Selenium	ND	0.010		mg/L	10	6/16/2015 2:40:27 PM	19666
Uranium	0.014	0.0025		mg/L	5	6/16/2015 2:18:40 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:25:31 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	23	1.0		mg/L	1	6/9/2015 8:00:49 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 8:00:49 PM	19616
Surr: DNOP	108	76.5-150		%REC	1	6/9/2015 8:00:49 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	79	2.5		mg/L	50	6/9/2015 1:08:15 AM	R26688
Surr: BFB	103	57.8-137		%REC	50	6/9/2015 1:08:15 AM	R26688

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:35:00 AM
Lab ID: 1506309-003
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4-Dimethylphenol	100	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:35:00 AM
Lab ID: 1506309-003
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1-Methylnaphthalene	66	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Methylnaphthalene	84	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Methylphenol	350	50		µg/L	5	6/10/2015 3:56:35 PM	19625
3+4-Methylphenol	540	50		µg/L	5	6/10/2015 3:56:35 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Naphthalene	180	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Phenol	280	50		µg/L	5	6/10/2015 3:56:35 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Surr: 2-Fluorophenol	17.4	14.9-111		%REC	1	6/10/2015 12:12:33 PM	19625
Surr: Phenol-d5	93.8	11.3-108		%REC	1	6/10/2015 12:12:33 PM	19625
Surr: 2,4,6-Tribromophenol	123	15.7-154		%REC	5	6/10/2015 3:56:35 PM	19625
Surr: Nitrobenzene-d5	98.9	47.8-106		%REC	1	6/10/2015 12:12:33 PM	19625
Surr: 2-Fluorobiphenyl	114	21.3-123		%REC	5	6/10/2015 3:56:35 PM	19625
Surr: 4-Terphenyl-d14	96.7	14.3-135		%REC	1	6/10/2015 12:12:33 PM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:35:00 AM
Lab ID: 1506309-003
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	10000	500		µg/L	500	6/13/2015 7:32:59 AM	R26816
Toluene	20000	500		µg/L	500	6/13/2015 7:32:59 AM	R26816
Ethylbenzene	1500	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,4-Trimethylbenzene	790	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,3,5-Trimethylbenzene	210	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Naphthalene	190	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
1-Methylnaphthalene	ND	200		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Methylnaphthalene	ND	200		µg/L	50	6/13/2015 8:01:46 AM	R26816
Acetone	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromodichloromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromoform	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromomethane	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Butanone	1300	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Carbon disulfide	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Carbon Tetrachloride	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chloroethane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chloroform	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chloromethane	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Chlorotoluene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
4-Chlorotoluene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
cis-1,2-DCE	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Dibromochloromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Dibromomethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,3-Dichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,4-Dichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Dichlorodifluoromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1-Dichloroethane	60	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1-Dichloroethene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dichloropropane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,3-Dichloropropane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
2,2-Dichloropropane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-10
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 10:35:00 AM
Lab ID: 1506309-003
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Hexachlorobutadiene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Hexanone	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Isopropylbenzene	54	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
4-Isopropyltoluene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
4-Methyl-2-pentanone	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Methylene Chloride	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
n-Butylbenzene	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
n-Propylbenzene	130	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
sec-Butylbenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Styrene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
tert-Butylbenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
trans-1,2-DCE	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,1-Trichloroethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,2-Trichloroethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Trichloroethene (TCE)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Trichlorofluoromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,3-Trichloropropane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Vinyl chloride	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Xylenes, Total	6500	75		µg/L	50	6/13/2015 8:01:46 AM	R26816
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816
Surr: Dibromofluoromethane	94.1	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816
Surr: Toluene-d8	102	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:10:00 AM
Lab ID: 1506309-004
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.7	0.010	*	mg/L	5	6/15/2015 7:30:32 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:28:50 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:28:50 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:28:50 PM	R26842
Iron	9.9	0.40	*	mg/L	20	6/18/2015 5:34:35 PM	R26942
Manganese	3.0	0.010	*	mg/L	5	6/15/2015 7:30:32 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:28:50 PM	R26842
Zinc	0.018	0.010		mg/L	1	6/15/2015 7:28:50 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.7	0.010	*	mg/L	5	6/11/2015 6:38:45 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:36:56 PM	19666
Chromium	ND	0.0060		mg/L	1	6/11/2015 6:36:56 PM	19666
Copper	ND	0.0060		mg/L	1	6/15/2015 5:19:03 PM	19666
Iron	13	1.0	*	mg/L	50	6/15/2015 5:20:47 PM	19666
Manganese	3.0	0.010	*	mg/L	5	6/11/2015 6:38:45 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:19:03 PM	19666
Zinc	0.013	0.010		mg/L	1	6/11/2015 6:36:56 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0056	0.0050		mg/L	5	6/16/2015 2:21:23 PM	19666
Lead	0.0027	0.0025		mg/L	5	6/16/2015 2:21:23 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:21:23 PM	19666
Uranium	ND	0.0025		mg/L	5	6/16/2015 2:21:23 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:27:37 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	2.8	1.0		mg/L	1	6/9/2015 8:22:11 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 8:22:11 PM	19616
Surr: DNOP	102	76.5-150		%REC	1	6/9/2015 8:22:11 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	71	1.0		mg/L	20	6/9/2015 1:33:32 AM	R26688
Surr: BFB	107	57.8-137		%REC	20	6/9/2015 1:33:32 AM	R26688

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:10:00 AM
Lab ID: 1506309-004
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Aniline	46	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4-Dimethylphenol	140	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:10:00 AM
Lab ID: 1506309-004
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1-Methylnaphthalene	20	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Methylnaphthalene	21	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Methylphenol	300	50		µg/L	5	6/10/2015 4:24:40 PM	19625
3+4-Methylphenol	230	50		µg/L	5	6/10/2015 4:24:40 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Naphthalene	70	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Phenol	53	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Surr: 2-Fluorophenol	18.8	14.9-111		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: Phenol-d5	44.6	11.3-108		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: 2,4,6-Tribromophenol	66.1	15.7-154		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: Nitrobenzene-d5	67.4	47.8-106		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: 2-Fluorobiphenyl	65.3	21.3-123		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: 4-Terphenyl-d14	61.0	14.3-135		%REC	1	6/10/2015 12:40:29 PM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:10:00 AM
Lab ID: 1506309-004
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	12000	200		µg/L	200	6/13/2015 8:59:26 AM	R26816
Toluene	13000	200		µg/L	200	6/13/2015 8:59:26 AM	R26816
Ethylbenzene	1200	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Methyl tert-butyl ether (MTBE)	41	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,4-Trimethylbenzene	570	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,3,5-Trimethylbenzene	140	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Naphthalene	110	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
1-Methylnaphthalene	ND	80		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Methylnaphthalene	ND	80		µg/L	20	6/13/2015 9:28:18 AM	R26816
Acetone	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromodichloromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromoform	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromomethane	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Butanone	430	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Carbon disulfide	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Carbon Tetrachloride	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chloroethane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chloroform	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chloromethane	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Chlorotoluene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
4-Chlorotoluene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
cis-1,2-DCE	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
cis-1,3-Dichloropropene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Dibromochloromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Dibromomethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,3-Dichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,4-Dichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Dichlorodifluoromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1-Dichloroethane	31	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1-Dichloroethene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dichloropropane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,3-Dichloropropane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
2,2-Dichloropropane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-11
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:10:00 AM
Lab ID: 1506309-004
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Hexachlorobutadiene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Hexanone	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Isopropylbenzene	36	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
4-Isopropyltoluene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
4-Methyl-2-pentanone	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Methylene Chloride	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
n-Butylbenzene	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
n-Propylbenzene	99	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
sec-Butylbenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Styrene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
tert-Butylbenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Tetrachloroethene (PCE)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
trans-1,2-DCE	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
trans-1,3-Dichloropropene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,3-Trichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,4-Trichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,1-Trichloroethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,2-Trichloroethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Trichloroethene (TCE)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Trichlorofluoromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,3-Trichloropropane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Vinyl chloride	34	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Xylenes, Total	4900	30		µg/L	20	6/13/2015 9:28:18 AM	R26816
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816
Surr: Dibromofluoromethane	89.9	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816
Surr: Toluene-d8	103	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:48:00 AM
Lab ID: 1506309-005
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	2.2	0.010	*	mg/L	5	6/15/2015 7:34:04 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:32:22 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:32:22 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:32:22 PM	R26842
Iron	8.6	0.40	*	mg/L	20	6/19/2015 3:15:11 PM	R26969
Manganese	1.6	0.010	*	mg/L	5	6/15/2015 7:34:04 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:32:22 PM	R26842
Zinc	0.023	0.010		mg/L	1	6/15/2015 7:32:22 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	2.5	0.010	*	mg/L	5	6/11/2015 6:51:08 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:49:16 PM	19666
Chromium	0.0087	0.0060		mg/L	1	6/11/2015 6:49:16 PM	19666
Copper	ND	0.0060		mg/L	1	6/15/2015 5:22:41 PM	19666
Iron	13	0.40	*	mg/L	20	6/15/2015 5:24:21 PM	19666
Manganese	1.9	0.010	*	mg/L	5	6/11/2015 6:51:08 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:22:41 PM	19666
Zinc	0.017	0.010		mg/L	1	6/11/2015 6:49:16 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.0082	0.0050		mg/L	5	6/16/2015 2:24:07 PM	19666
Lead	0.0097	0.0025		mg/L	5	6/16/2015 2:24:07 PM	19666
Selenium	ND	0.010		mg/L	10	6/16/2015 2:48:40 PM	19666
Uranium	0.0053	0.0025		mg/L	5	6/16/2015 2:24:07 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:29:43 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	2.3	1.0		mg/L	1	6/9/2015 8:43:27 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 8:43:27 PM	19616
Surr: DNOP	104	76.5-150		%REC	1	6/9/2015 8:43:27 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	6.2	0.50		mg/L	10	6/9/2015 1:58:41 AM	R26688
Surr: BFB	106	57.8-137		%REC	10	6/9/2015 1:58:41 AM	R26688

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:48:00 AM
Lab ID: 1506309-005
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Carbazole	15	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:48:00 AM
Lab ID: 1506309-005
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1-Methylnaphthalene	120	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Methylnaphthalene	76	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Naphthalene	190	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Surr: 2-Fluorophenol	48.5	14.9-111		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: Phenol-d5	60.7	11.3-108		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: 2,4,6-Tribromophenol	71.0	15.7-154		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: Nitrobenzene-d5	78.1	47.8-106		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: 2-Fluorobiphenyl	80.1	21.3-123		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: 4-Terphenyl-d14	70.0	14.3-135		%REC	1	6/10/2015 1:08:25 PM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:48:00 AM
Lab ID: 1506309-005
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	310	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Toluene	13	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Ethylbenzene	450	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Methyl tert-butyl ether (MTBE)	1300	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,4-Trimethylbenzene	270	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,3,5-Trimethylbenzene	23	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Naphthalene	220	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
1-Methylnaphthalene	140	40		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Methylnaphthalene	86	40		µg/L	10	6/15/2015 3:50:09 PM	R26844
Acetone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromodichloromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromoform	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromomethane	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Butanone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Carbon disulfide	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Carbon Tetrachloride	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chloroethane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chloroform	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chloromethane	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Chlorotoluene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
4-Chlorotoluene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
cis-1,2-DCE	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Dibromochloromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Dibromomethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,3-Dichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,4-Dichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Dichlorodifluoromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1-Dichloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1-Dichloroethene	22	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dichloropropane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,3-Dichloropropane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
2,2-Dichloropropane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844

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Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-4
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 11:48:00 AM
Lab ID: 1506309-005
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Hexachlorobutadiene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Hexanone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Isopropylbenzene	21	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
4-Isopropyltoluene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
4-Methyl-2-pentanone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Methylene Chloride	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
n-Butylbenzene	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
n-Propylbenzene	37	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
sec-Butylbenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Styrene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
tert-Butylbenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
trans-1,2-DCE	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,1-Trichloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,2-Trichloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Trichloroethene (TCE)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Trichlorofluoromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,3-Trichloropropane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Vinyl chloride	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Xylenes, Total	560	15		µg/L	10	6/15/2015 3:50:09 PM	R26844
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844
Surr: 4-Bromofluorobenzene	87.9	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844
Surr: Dibromofluoromethane	103	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844
Surr: Toluene-d8	104	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 1:45:00 PM
Lab ID: 1506309-006
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
Uranium	0.023	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.19	0.0020		mg/L	1	6/15/2015 7:35:55 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:35:55 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:35:55 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:35:55 PM	R26842
Iron	1.8	0.10	*	mg/L	5	6/15/2015 7:37:35 PM	R26842
Manganese	2.3	0.010	*	mg/L	5	6/15/2015 7:37:35 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:35:55 PM	R26842
Zinc	0.039	0.010		mg/L	1	6/15/2015 7:35:55 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	0.23	0.0020		mg/L	1	6/11/2015 6:52:52 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:52:52 PM	19666
Chromium	0.0063	0.0060		mg/L	1	6/11/2015 6:52:52 PM	19666
Copper	0.0097	0.0060		mg/L	1	6/15/2015 5:26:20 PM	19666
Iron	4.8	0.10	*	mg/L	5	6/11/2015 6:54:37 PM	19666
Manganese	2.6	0.010	*	mg/L	5	6/11/2015 6:54:37 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:26:20 PM	19666
Zinc	0.044	0.010		mg/L	1	6/11/2015 6:52:52 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/16/2015 2:26:50 PM	19666
Lead	0.036	0.0025	*	mg/L	5	6/16/2015 2:26:50 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:26:50 PM	19666
Uranium	0.024	0.0025		mg/L	5	6/16/2015 2:26:50 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:31:41 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	5.7	1.0		mg/L	1	6/9/2015 9:04:45 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:04:45 PM	19616
Surr: DNOP	95.1	76.5-150		%REC	1	6/9/2015 9:04:45 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	12	0.50		mg/L	10	6/9/2015 2:23:59 AM	R26688
Surr: BFB	167	57.8-137	S	%REC	10	6/9/2015 2:23:59 AM	R26688

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 1:45:00 PM
Lab ID: 1506309-006
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 1:45:00 PM
Lab ID: 1506309-006
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1-Methylnaphthalene	74	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Methylnaphthalene	110	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Methylphenol	28	10		µg/L	1	6/10/2015 1:36:23 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Naphthalene	230	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Surr: 2-Fluorophenol	71.6	14.9-111		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: Phenol-d5	61.1	11.3-108		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: 2,4,6-Tribromophenol	100	15.7-154		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: Nitrobenzene-d5	83.2	47.8-106		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: 2-Fluorobiphenyl	88.1	21.3-123		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: 4-Terphenyl-d14	85.1	14.3-135		%REC	1	6/10/2015 1:36:23 PM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 1:45:00 PM
Lab ID: 1506309-006
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	1200	100		µg/L	100	6/16/2015 11:06:03 AM	R26872
Toluene	58	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Ethylbenzene	17	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Methyl tert-butyl ether (MTBE)	54	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,4-Trimethylbenzene	950	100		µg/L	100	6/16/2015 11:06:03 AM	R26872
1,3,5-Trimethylbenzene	330	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dichloroethane (EDC)	11	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Naphthalene	720	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
1-Methylnaphthalene	150	40		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Methylnaphthalene	270	40		µg/L	10	6/16/2015 11:34:55 AM	R26872
Acetone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromodichloromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromoform	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromomethane	ND	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Butanone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Carbon disulfide	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Carbon Tetrachloride	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chloroethane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chloroform	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chloromethane	ND	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Chlorotoluene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
4-Chlorotoluene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
cis-1,2-DCE	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Dibromochloromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Dibromomethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,3-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,4-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Dichlorodifluoromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1-Dichloroethane	15	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1-Dichloroethene	100	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dichloropropane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,3-Dichloropropane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
2,2-Dichloropropane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-37
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 1:45:00 PM
Lab ID: 1506309-006
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Hexachlorobutadiene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Hexanone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Isopropylbenzene	150	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
4-Isopropyltoluene	21	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
4-Methyl-2-pentanone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Methylene Chloride	ND	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
n-Butylbenzene	140	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
n-Propylbenzene	190	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
sec-Butylbenzene	45	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Styrene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
tert-Butylbenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
trans-1,2-DCE	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,1-Trichloroethane	19	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,2-Trichloroethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Trichloroethene (TCE)	170	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Trichlorofluoromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,3-Trichloropropane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Vinyl chloride	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Xylenes, Total	930	15		µg/L	10	6/16/2015 11:34:55 AM	R26872
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872
Surr: 4-Bromofluorobenzene	102	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872
Surr: Dibromofluoromethane	99.8	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872
Surr: Toluene-d8	102	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872

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Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:10:00 PM
Lab ID: 1506309-007
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	0.016	0.0050	*	mg/L	5	6/17/2015 7:53:29 PM	R26904
Lead	ND	0.0050		mg/L	5	6/17/2015 7:53:29 PM	R26904
Selenium	ND	0.0050		mg/L	5	6/17/2015 7:53:29 PM	R26904
Uranium	ND	0.0050		mg/L	5	6/17/2015 7:53:29 PM	R26904
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	6.6	0.040	*	mg/L	20	6/18/2015 5:46:08 PM	R26942
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:39:31 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:39:31 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:39:31 PM	R26842
Iron	18	1.0	*	mg/L	50	6/19/2015 3:17:17 PM	R26969
Manganese	2.4	0.010	*	mg/L	5	6/15/2015 7:41:13 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:39:31 PM	R26842
Zinc	0.012	0.010		mg/L	1	6/15/2015 7:39:31 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	6.8	0.10	*	mg/L	50	6/15/2015 5:29:44 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:56:44 PM	19666
Chromium	0.0096	0.0060		mg/L	1	6/11/2015 6:56:44 PM	19666
Copper	0.0078	0.0060		mg/L	1	6/15/2015 5:28:03 PM	19666
Iron	22	1.0	*	mg/L	50	6/15/2015 5:29:44 PM	19666
Manganese	2.8	0.010	*	mg/L	5	6/11/2015 6:58:32 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:28:03 PM	19666
Zinc	0.023	0.010		mg/L	1	6/11/2015 6:56:44 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	0.017	0.0050	*	mg/L	5	6/16/2015 2:29:33 PM	19666
Lead	0.016	0.0025	*	mg/L	5	6/16/2015 2:29:33 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:29:33 PM	19666
Uranium	ND	0.0025		mg/L	5	6/16/2015 2:29:33 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:33:41 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	13	1.0		mg/L	1	6/9/2015 9:25:58 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:25:58 PM	19616
Surr: DNOP	102	76.5-150		%REC	1	6/9/2015 9:25:58 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	30	5.0		mg/L	100	6/10/2015 10:07:46 AM	R26753
Surr: BFB	95.5	57.8-137		%REC	100	6/10/2015 10:07:46 AM	R26753

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O	RSD is greater than RSDlimit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:10:00 PM
Lab ID: 1506309-007
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:10:00 PM
Lab ID: 1506309-007
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Fluorene	13	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1-Methylnaphthalene	330	50		µg/L	5	6/10/2015 4:52:47 PM	19625
2-Methylnaphthalene	510	50		µg/L	5	6/10/2015 4:52:47 PM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Naphthalene	490	50		µg/L	5	6/10/2015 4:52:47 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Phenol	56	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Surr: 2-Fluorophenol	42.7	14.9-111		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: Phenol-d5	60.8	11.3-108		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: 2,4,6-Tribromophenol	63.0	15.7-154		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: Nitrobenzene-d5	89.4	47.8-106		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: 2-Fluorobiphenyl	93.5	21.3-123		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: 4-Terphenyl-d14	79.1	14.3-135		%REC	1	6/10/2015 2:04:39 PM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:10:00 PM
Lab ID: 1506309-007
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	8100	100		µg/L	100	6/15/2015 7:11:37 PM	R26844
Toluene	34	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Ethylbenzene	1600	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Methyl tert-butyl ether (MTBE)	8400	100		µg/L	100	6/15/2015 7:11:37 PM	R26844
1,2,4-Trimethylbenzene	65	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,3,5-Trimethylbenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Naphthalene	580	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
1-Methylnaphthalene	340	80		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Methylnaphthalene	580	80		µg/L	20	6/16/2015 12:03:46 PM	R26872
Acetone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromodichloromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromoform	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromomethane	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Butanone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Carbon disulfide	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Carbon Tetrachloride	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chloroethane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chloroform	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chloromethane	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Chlorotoluene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
4-Chlorotoluene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
cis-1,2-DCE	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
cis-1,3-Dichloropropene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Dibromochloromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Dibromomethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,3-Dichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,4-Dichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Dichlorodifluoromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1-Dichloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1-Dichloroethene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dichloropropane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,3-Dichloropropane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
2,2-Dichloropropane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-36
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:10:00 PM
Lab ID: 1506309-007
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Hexachlorobutadiene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Hexanone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Isopropylbenzene	44	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
4-Isopropyltoluene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
4-Methyl-2-pentanone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Methylene Chloride	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
n-Butylbenzene	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
n-Propylbenzene	91	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
sec-Butylbenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Styrene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
tert-Butylbenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Tetrachloroethene (PCE)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
trans-1,2-DCE	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
trans-1,3-Dichloropropene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2,3-Trichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2,4-Trichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,1-Trichloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,2-Trichloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Trichloroethene (TCE)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Trichlorofluoromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2,3-Trichloropropane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Vinyl chloride	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Xylenes, Total	140	30		µg/L	20	6/16/2015 12:03:46 PM	R26872
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872
Surr: Dibromofluoromethane	103	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872
Surr: Toluene-d8	110	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:30:00 PM
Lab ID: 1506309-008
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
Lead	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
Selenium	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
Uranium	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Barium	0.36	0.0020		mg/L	1	6/15/2015 7:50:12 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:50:12 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:50:12 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:50:12 PM	R26842
Iron	2.6	0.10	*	mg/L	5	6/15/2015 7:51:53 PM	R26842
Manganese	3.1	0.010	*	mg/L	5	6/15/2015 7:51:53 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:50:12 PM	R26842
Zinc	0.017	0.010		mg/L	1	6/15/2015 7:50:12 PM	R26842
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Barium	5.0	0.010	*	mg/L	5	6/11/2015 7:02:21 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 7:00:27 PM	19666
Chromium	0.018	0.0060		mg/L	1	6/11/2015 7:00:27 PM	19666
Copper	0.013	0.0060		mg/L	1	6/15/2015 5:31:42 PM	19666
Iron	13	1.0	*	mg/L	50	6/15/2015 5:33:28 PM	19666
Manganese	6.4	0.10	*	mg/L	50	6/15/2015 5:33:28 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:31:42 PM	19666
Zinc	0.032	0.010		mg/L	1	6/11/2015 7:00:27 PM	19666
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	6/16/2015 2:32:16 PM	19666
Lead	0.023	0.0025	*	mg/L	5	6/16/2015 2:32:16 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:32:16 PM	19666
Uranium	0.0044	0.0025		mg/L	5	6/16/2015 2:32:16 PM	19666
EPA METHOD 245.1: MERCURY						Analyst:	**MED**
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:35:41 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**KJH**
Diesel Range Organics (DRO)	2.3	1.0		mg/L	1	6/9/2015 9:47:17 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:47:17 PM	19616
Surr: DNOP	105	76.5-150		%REC	1	6/9/2015 9:47:17 PM	19616
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2.9	0.050		mg/L	1	6/10/2015 11:48:10 AM	R26753
Surr: BFB	152	57.8-137	S	%REC	1	6/10/2015 11:48:10 AM	R26753

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:30:00 PM
Lab ID: 1506309-008
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:30:00 PM
Lab ID: 1506309-008
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Naphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Surr: 2-Fluorophenol	34.1	14.9-111		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: Phenol-d5	56.5	11.3-108		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: 2,4,6-Tribromophenol	55.8	15.7-154		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: Nitrobenzene-d5	85.8	47.8-106		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: 2-Fluorobiphenyl	85.9	21.3-123		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: 4-Terphenyl-d14	74.5	14.3-135		%REC	1	6/10/2015 2:32:40 PM	19625
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:30:00 PM
Lab ID: 1506309-008
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	790	10		µg/L	10	6/15/2015 8:09:21 PM	R26844
Toluene	2.3	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Ethylbenzene	190	10		µg/L	10	6/15/2015 8:09:21 PM	R26844
Methyl tert-butyl ether (MTBE)	27	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,4-Trimethylbenzene	9.5	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,3,5-Trimethylbenzene	2.3	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Naphthalene	3.9	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1-Methylnaphthalene	4.2	4.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Methylnaphthalene	ND	4.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Acetone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromoform	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromomethane	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Butanone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Carbon disulfide	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chloroethane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chloroform	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chloromethane	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
4-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Dibromomethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,3-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2,2-Dichloropropane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844

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Qualifiers:

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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
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MKTF-35
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015 2:30:00 PM
Lab ID: 1506309-008
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Hexachlorobutadiene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Hexanone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Isopropylbenzene	8.4	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
4-Isopropyltoluene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Methylene Chloride	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
n-Butylbenzene	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
n-Propylbenzene	22	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
sec-Butylbenzene	1.7	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Styrene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
tert-Butylbenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Vinyl chloride	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Xylenes, Total	2.1	1.5		µg/L	1	6/15/2015 8:38:13 PM	R26844
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844
Surr: 4-Bromofluorobenzene	73.5	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844
Surr: Toluene-d8	107	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: BLIND DUPLICATE
Project: 2015 2nd Quarter MKTF WELLS
Collection Date: 6/4/2015
Lab ID: 1506309-009
Matrix: AQUEOUS
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
3,3´-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Matrix: AQUEOUS
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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1-Methylnaphthalene	95	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Methylnaphthalene	150	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Methylphenol	28	10		µg/L	1	6/10/2015 3:00:34 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Naphthalene	260	50		µg/L	5	6/10/2015 5:20:51 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Surr: 2-Fluorophenol	67.4	14.9-111		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: Phenol-d5	52.3	11.3-108		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: 2,4,6-Tribromophenol	88.3	15.7-154		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: Nitrobenzene-d5	72.5	47.8-106		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: 2-Fluorobiphenyl	81.2	21.3-123		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: 4-Terphenyl-d14	59.4	14.3-135		%REC	1	6/10/2015 3:00:34 PM	19625

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 2nd Quarter MKTF WELLS
Collection Date:
Lab ID: 1506309-010
Matrix: TRIP BLANK
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/10/2015 12:38:31 PM	R26753
Surr: BFB	89.7	57.8-137		%REC	1	6/10/2015 12:38:31 PM	R26753
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Toluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Ethylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Naphthalene	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1-Methylnaphthalene	ND	4.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Methylnaphthalene	ND	4.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Acetone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromoform	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromomethane	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Butanone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Carbon disulfide	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chloroethane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chloroform	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chloromethane	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
4-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Dibromomethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844

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

Qualifiers:

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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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: 2015 2nd Quarter MKTF WELLS
Collection Date:
Lab ID: 1506309-010
Matrix: TRIP BLANK
Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,3-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2,2-Dichloropropane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Hexachlorobutadiene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Hexanone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Isopropylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
4-Isopropyltoluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Methylene Chloride	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
n-Butylbenzene	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
n-Propylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
sec-Butylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Styrene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
tert-Butylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Vinyl chloride	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Xylenes, Total	ND	1.5		µg/L	1	6/15/2015 9:35:42 PM	R26844
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844
Surr: Dibromofluoromethane	103	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844
Surr: Toluene-d8	104	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844

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

Qualifiers:

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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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **800962** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **800963** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.48	0.020	0.5000	0	95.8	85	115			
Manganese	0.46	0.0020	0.5000	0	92.8	85	115			
Silver	0.10	0.0050	0.1000	0	99.8	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801190** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

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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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26842** RunNo: **26842**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801191** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			
Silver	0.10	0.0050	0.1000	0	99.6	85	115			
Zinc	0.47	0.010	0.5000	0	94.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26895** RunNo: **26895**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **802954** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26895** RunNo: **26895**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **802955** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.098	0.0050	0.1000	0	98.0	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26942** RunNo: **26942**
Prep Date: Analysis Date: **6/18/2015** SeqNo: **804362** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26942** RunNo: **26942**
Prep Date: Analysis Date: **6/18/2015** SeqNo: **804363** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.5	85	115			
Iron	0.50	0.020	0.5000	0	99.9	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26942** RunNo: **26942**
Prep Date: Analysis Date: **6/18/2015** SeqNo: **804364** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26942** RunNo: **26942**
Prep Date: Analysis Date: **6/18/2015** SeqNo: **804365** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.2	85	115			
Iron	0.52	0.020	0.5000	0	103	85	115			
Manganese	0.49	0.0020	0.5000	0	97.3	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26969** RunNo: **26969**
Prep Date: Analysis Date: **6/19/2015** SeqNo: **805268** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26969** RunNo: **26969**
Prep Date: Analysis Date: **6/19/2015** SeqNo: **805269** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.48	0.020	0.5000	0	96.5	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26969** RunNo: **26969**
Prep Date: Analysis Date: **6/19/2015** SeqNo: **805397** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26969** RunNo: **26969**
Prep Date: Analysis Date: **6/19/2015** SeqNo: **805398** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	97.4	85	115			

Qualifiers:

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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 Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **MB-19666** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **19666** RunNo: **26786**
Prep Date: **6/10/2015** Analysis Date: **6/11/2015** SeqNo: **798816** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-19666** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **19666** RunNo: **26786**
Prep Date: **6/10/2015** Analysis Date: **6/11/2015** SeqNo: **798817** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.5	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.48	0.0060	0.5000	0	96.7	85	115			
Iron	0.49	0.020	0.5000	0	98.5	85	115			
Manganese	0.49	0.0020	0.5000	0	97.4	85	115			
Silver	0.096	0.0050	0.1000	0	95.6	85	115			
Zinc	0.48	0.010	0.5000	0	95.7	85	115			

Sample ID **MB-19666** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **19666** RunNo: **26842**
Prep Date: **6/10/2015** Analysis Date: **6/15/2015** SeqNo: **800957** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								

Sample ID **LCS-19666** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **19666** RunNo: **26842**
Prep Date: **6/10/2015** Analysis Date: **6/15/2015** SeqNo: **800958** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.50	0.0060	0.5000	0	101	85	115			

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802096** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26876** RunNo: **26876**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **802101** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26904** RunNo: **26904**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **803447** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26904** RunNo: **26904**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **803447** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.9	85	115			
Lead	0.012	0.00050	0.01250	0	97.2	85	115			
Selenium	0.025	0.0010	0.02500	0	98.5	85	115			
Uranium	0.012	0.00050	0.01250	0	97.2	85	115			

Sample ID **LCS** SampType: **LCS** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW** Batch ID: **R26904** RunNo: **26904**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **803448** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.8	85	115			
Lead	0.012	0.00050	0.01250	0	97.2	85	115			
Selenium	0.024	0.0010	0.02500	0	95.9	85	115			
Uranium	0.012	0.00050	0.01250	0	98.2	85	115			

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26904** RunNo: **26904**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **803449** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID **MB** SampType: **MBLK** TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW** Batch ID: **R26904** RunNo: **26904**
Prep Date: Analysis Date: **6/17/2015** SeqNo: **803450** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Qualifiers:

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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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **MB-19717**	SampType: **MBLK**	TestCode: **EPA Method 245.1: Mercury**			
Client ID: **PBW**	Batch ID: **19717**	RunNo: **26833**			
Prep Date: **6/15/2015**	Analysis Date: **6/15/2015**	SeqNo: **800384**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-19717**	SampType: **LCS**	TestCode: **EPA Method 245.1: Mercury**			
Client ID: **LCSW**	Batch ID: **19717**	RunNo: **26833**			
Prep Date: **6/15/2015**	Analysis Date: **6/15/2015**	SeqNo: **800385**	Units: **mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	100	80	120			

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **MB-19616** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW** Batch ID: **19616** RunNo: **26673**
Prep Date: **6/8/2015** Analysis Date: **6/9/2015** SeqNo: **796030** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID **LCS-19616** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW** Batch ID: **19616** RunNo: **26673**
Prep Date: **6/8/2015** Analysis Date: **6/9/2015** SeqNo: **796031** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.3	60.1	156			
Surr: DNOP	0.45		0.5000		89.8	76.5	150			

Sample ID **1506309-002CMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MKTF-9** Batch ID: **19616** RunNo: **26673**
Prep Date: **6/8/2015** Analysis Date: **6/9/2015** SeqNo: **796033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.8	1.0	5.000	1.843	99.2	75.9	164			
Surr: DNOP	0.46		0.5000		92.3	76.5	150			

Sample ID **1506309-002CMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MKTF-9** Batch ID: **19616** RunNo: **26673**
Prep Date: **6/8/2015** Analysis Date: **6/9/2015** SeqNo: **796034** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.7	1.0	5.000	1.843	97.8	75.9	164	1.02	22.1	
Surr: DNOP	0.46		0.5000		91.0	76.5	150	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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R26688** RunNo: **26688**
Prep Date: Analysis Date: **6/8/2015** SeqNo: **795136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.0	57.8	137			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R26688** RunNo: **26688**
Prep Date: Analysis Date: **6/8/2015** SeqNo: **795137** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.0	80	120			
Surr: BFB	20		20.00		100	57.8	137			

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW** Batch ID: **R26753** RunNo: **26753**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797263** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.9	57.8	137			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW** Batch ID: **R26753** RunNo: **26753**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797264** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	98.5	80	120			
Surr: BFB	21		20.00		103	57.8	137			

Sample ID **1506309-007BMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-36** Batch ID: **R26753** RunNo: **26753**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797266** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	75	5.0	50.00	30.40	88.6	51	131			
Surr: BFB	2100		2000		107	57.8	137			

Sample ID **1506309-007BMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MKTF-36** Batch ID: **R26753** RunNo: **26753**
Prep Date: Analysis Date: **6/10/2015** SeqNo: **797267** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID	**1506309-007BMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**MKTF-36**	Batch ID:	**R26753**	RunNo:	**26753**
Prep Date:		Analysis Date:	**6/10/2015**	SeqNo:	**797267** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	63	5.0	50.00	30.40	65.8	51	131	16.5	20	
Surr: BFB	2100		2000		105	57.8	137	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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R26816**	RunNo: **26816**	
Prep Date:	Analysis Date: **6/12/2015**	SeqNo: **799731**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R26816**	RunNo: **26816**
Prep Date:	Analysis Date: **6/12/2015**	SeqNo: **799731** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R26816**	RunNo: **26816**
Prep Date:	Analysis Date: **6/12/2015**	SeqNo: **799733** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	99.9	70	130			

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26816** RunNo: **26816**
Prep Date: Analysis Date: **6/12/2015** SeqNo: **799733** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	91.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **vsb-deli** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26844** RunNo: **26844**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801208** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **vsb-deli**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R26844**	RunNo: **26844**	
Prep Date:	Analysis Date: **6/15/2015**	SeqNo: **801208**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **vsb-deli** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26844** RunNo: **26844**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801208** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26844** RunNo: **26844**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801210** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	94.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID **1506309-005a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-4** Batch ID: **R26844** RunNo: **26844**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801280** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	510	10	200.0	310.5	98.8	70	130			
Toluene	210	10	200.0	12.62	99.1	70	130			
Chlorobenzene	200	10	200.0	0	98.6	70	130			
1,1-Dichloroethene	240	10	200.0	21.82	110	70	130			
Trichloroethene (TCE)	180	10	200.0	2.894	88.9	70	130			
Surr: 1,2-Dichloroethane-d4	99		100.0		99.0	70	130			
Surr: 4-Bromofluorobenzene	90		100.0		90.3	70	130			
Surr: Dibromofluoromethane	99		100.0		99.0	70	130			
Surr: Toluene-d8	98		100.0		98.0	70	130			

Sample ID **1506309-005a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-4** Batch ID: **R26844** RunNo: **26844**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801281** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	480	10	200.0	310.5	84.0	70	130	5.96	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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **1506309-005a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MKTF-4** Batch ID: **R26844** RunNo: **26844**
Prep Date: Analysis Date: **6/15/2015** SeqNo: **801281** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	210	10	200.0	12.62	100	70	130	0.879	20	
Chlorobenzene	190	10	200.0	0	96.5	70	130	2.17	20	
1,1-Dichloroethene	230	10	200.0	21.82	106	70	130	3.40	20	
Trichloroethene (TCE)	170	10	200.0	2.894	84.5	70	130	5.01	20	
Surr: 1,2-Dichloroethane-d4	100		100.0		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	88		100.0		88.1	70	130	0	0	
Surr: Dibromofluoromethane	99		100.0		99.2	70	130	0	0	
Surr: Toluene-d8	100		100.0		101	70	130	0	0	

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26872** RunNo: **26872**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **801831** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **rb1**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R26872**	RunNo: **26872**	
Prep Date:	Analysis Date: **6/16/2015**	SeqNo: **801831**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R26872** RunNo: **26872**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **801831** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R26872** RunNo: **26872**
Prep Date: Analysis Date: **6/16/2015** SeqNo: **801833** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.5	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	105	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	92.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **mb-19625**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **19625**	RunNo: **26748**			
Prep Date: **6/9/2015**	Analysis Date: **6/10/2015**	SeqNo: **797128**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3´-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **mb-19625**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**			
Client ID: **PBW**	Batch ID: **19625**	RunNo: **26748**			
Prep Date: **6/9/2015**	Analysis Date: **6/10/2015**	SeqNo: **797128**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		68.9	14.9	111			
Surr: Phenol-d5	150		200.0		75.0	11.3	108			
Surr: 2,4,6-Tribromophenol	160		200.0		78.5	15.7	154			
Surr: Nitrobenzene-d5	73		100.0		73.2	47.8	106			
Surr: 2-Fluorobiphenyl	74		100.0		73.6	21.3	123			
Surr: 4-Terphenyl-d14	69		100.0		69.3	14.3	135			

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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID **lcs-19625** SampType: **LCS** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW** Batch ID: **19625** RunNo: **26748**
Prep Date: **6/9/2015** Analysis Date: **6/10/2015** SeqNo: **797129** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	76.8	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	72.6	58.1	103			
2-Chlorophenol	150	10	200.0	0	73.3	49.5	96.8			
1,4-Dichlorobenzene	70	10	100.0	0	70.4	40.4	89.4			
2,4-Dinitrotoluene	54	10	100.0	0	54.4	38.6	91.3			
N-Nitrosodi-n-propylamine	69	10	100.0	0	68.7	53.9	95.6			
4-Nitrophenol	110	10	200.0	0	57.1	26.4	108			
Pentachlorophenol	130	20	200.0	0	62.6	36.5	86.6			
Phenol	140	10	200.0	0	68.9	29.3	108			
Pyrene	65	10	100.0	0	65.0	45.7	100			
1,2,4-Trichlorobenzene	75	10	100.0	0	74.6	39.3	94.5			
Surr: 2-Fluorophenol	140		200.0		68.8	14.9	111			
Surr: Phenol-d5	150		200.0		73.5	11.3	108			
Surr: 2,4,6-Tribromophenol	170		200.0		82.7	15.7	154			
Surr: Nitrobenzene-d5	77		100.0		77.2	47.8	106			
Surr: 2-Fluorobiphenyl	80		100.0		80.0	21.3	123			
Surr: 4-Terphenyl-d14	68		100.0		67.8	14.3	135			

Sample ID **lcsd-19625** SampType: **LCSD** TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02** Batch ID: **19625** RunNo: **26748**
Prep Date: **6/9/2015** Analysis Date: **6/10/2015** SeqNo: **797133** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.4	47.8	99.7	22.3	28.2	
4-Chloro-3-methylphenol	140	10	200.0	0	67.7	58.1	103	6.93	24.4	
2-Chlorophenol	130	10	200.0	0	66.6	49.5	96.8	9.63	28.1	
1,4-Dichlorobenzene	65	10	100.0	0	65.0	40.4	89.4	8.03	31.2	
2,4-Dinitrotoluene	50	10	100.0	0	50.2	38.6	91.3	8.07	44.4	
N-Nitrosodi-n-propylamine	64	10	100.0	0	64.2	53.9	95.6	6.68	24.2	
4-Nitrophenol	110	10	200.0	0	53.0	26.4	108	7.34	36.6	
Pentachlorophenol	110	20	200.0	0	55.8	36.5	86.6	11.5	29.5	
Phenol	130	10	200.0	0	64.0	29.3	108	7.44	30	
Pyrene	65	10	100.0	0	65.0	45.7	100	0.0923	31	
1,2,4-Trichlorobenzene	68	10	100.0	0	67.6	39.3	94.5	9.84	24	
Surr: 2-Fluorophenol	120		200.0		60.8	14.9	111	0	0	
Surr: Phenol-d5	130		200.0		66.4	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	140		200.0		69.1	15.7	154	0	0	
Surr: Nitrobenzene-d5	61		100.0		61.5	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	56		100.0		55.7	21.3	123	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 Not In Range
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#: **1506309**
29-Jun-15

Client: Western Refining Southwest, Gallup
Project: 2015 2nd Quarter MKTF WELLS

Sample ID	**lcsd-19625**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**
Client ID:	**LCSS02**	Batch ID:	**19625**	RunNo:	**26748**
Prep Date:	**6/9/2015**	Analysis Date:	**6/10/2015**	SeqNo:	**797133** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	48		100.0		47.7	14.3	135	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 Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **1506309** RcptNo: 1

Received by/date: 06/06/15

Logged By: **Lindsay Mangin** **6/6/2015 9:00:00 AM**

Completed By: **Lindsay Mangin** **6/6/2015 9:44:19 AM**

Reviewed By: AT 06/08/15

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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 14
(<2 or >12 unless noted)

Adjusted? 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	1.8	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

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 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 2nd Quarter MKTF WELLS

Project #:

PO #20825205

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1506309	8260+MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Air Bubbles (Y or N)
6/4/2015	700	H20	FIELD BLANK	3-40ML VOAS	HCL	-001	X					
6/4/2015	1005	H20	MKTF-9	MISC	MISC	-002	X	X	X	X	X	
6/4/2015	1035	H20	MKTF-10	MISC	MISC	-003	X	X	X	X	X	
6/4/2015	1110	H20	MKTF-11	MISC	MISC	-004	X	X	X	X	X	
6/4/2015	1148	H20	MKTF-4	MISC	MISC	-005	X	X	X	X	X	
6/4/2015	1345	H20	MKTF-37	MISC	MISC	-006	X	X	X	X	X	
6/4/2015	1410	H20	MKTF-36	MISC	MISC	-007	X	X	X	X	X	
6/4/2015	1430	H20	MKTF-35	MISC	MISC	-008	X	X	X	X	X	
6/4/2015			BLIND DUPLICATE			-009			X			
6/4/2015			TRIP ~~FIELD~~ BLANK			-010	X					

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/5/15	1000			6-5-15	300
Date:	Time:	Relinquished by:	Received by:	Date	Time
6-6-15	900			06/06/15	0900

Remarks:

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.

Collect a duplicate of 8270 from either one of the these wells.

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

November 15, 2013

Beck Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Wash Pad Evacuation Pit OrderNo.: 1311380

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/11/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1311380**
Date Reported: **11/15/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit
Project: Wash Pad Evacuation Pit
Collection Date: 11/8/2013 12:15:00 PM
Lab ID: 1311380-001
Matrix: SOIL
Received Date: 11/11/2013 12:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	380	10		mg/Kg	1	11/13/2013 10:17:27 AM	10262
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/13/2013 10:17:27 AM	10262
Surr: DNOP	90.8	66-131		%REC	1	11/13/2013 10:17:27 AM	10262
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	640	100		mg/Kg	20	11/12/2013 7:35:28 PM	10281
Surr: BFB	155	74.5-129	S	%REC	20	11/12/2013 7:35:28 PM	10281
MERCURY, TCLP						Analyst:	**JML**
Mercury	ND	0.020		mg/L	1	11/13/2013 3:15:15 PM	10302
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	11/13/2013 7:26:57 AM	10304
Barium	ND	100		mg/L	1	11/13/2013 7:26:57 AM	10304
Cadmium	ND	1.0		mg/L	1	11/13/2013 7:26:57 AM	10304
Chromium	ND	5.0		mg/L	1	11/13/2013 7:26:57 AM	10304
Lead	ND	5.0		mg/L	1	11/13/2013 7:26:57 AM	10304
Selenium	ND	1.0		mg/L	1	11/13/2013 7:26:57 AM	10304
Silver	ND	5.0		mg/L	1	11/13/2013 7:26:57 AM	10304
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**cadg**
Benzene	ND	0.50		ppm	10	11/13/2013 5:41:52 AM	10281
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	11/13/2013 5:41:52 AM	10281
2-Butanone	ND	200		ppm	10	11/13/2013 5:41:52 AM	10281
Carbon tetrachloride	ND	0.50		ppm	10	11/13/2013 5:41:52 AM	10281
Chlorobenzene	ND	100		ppm	10	11/13/2013 5:41:52 AM	10281
Chloroform	ND	6.0		ppm	10	11/13/2013 5:41:52 AM	10281
1,4-Dichlorobenzene	ND	7.5		ppm	10	11/13/2013 5:41:52 AM	10281
1,1-Dichloroethene	ND	0.70		ppm	10	11/13/2013 5:41:52 AM	10281
Tetrachloroethene (PCE)	ND	0.70		ppm	10	11/13/2013 5:41:52 AM	10281
Trichloroethene (TCE)	ND	0.50		ppm	10	11/13/2013 5:41:52 AM	10281
Vinyl chloride	ND	0.20		ppm	10	11/13/2013 5:41:52 AM	10281
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	10	11/13/2013 5:41:52 AM	10281
Surr: 4-Bromofluorobenzene	72.6	70-130		%REC	10	11/13/2013 5:41:52 AM	10281
Surr: Dibromofluoromethane	98.5	70-130		%REC	10	11/13/2013 5:41:52 AM	10281
Surr: Toluene-d8	95.0	70-130		%REC	10	11/13/2013 5:41:52 AM	10281

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

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

November 14, 2013

ESC Sample # : L668013-01

Date Received : November 12, 2013
Description :

Site ID :

Sample ID : 1311380-001B WASH PAD PIT

Project # :

Collected By :
Collection Date : 11/08/13 12:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	11/12/13	1
Ignitability	See Footnote		Deg. F	D93/1010A	11/13/13	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	11/14/13	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	11/14/13	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: 11/14/13 17:10 Printed: 11/14/13 17:10
L668013-01 (IGNITABILITY) - Did Not Ignite @ 170 F

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L668013

November 14, 2013

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG692231	11/14/13 16:10
Reactive Sulf.(SW846 7.3.4.1)	< 25	mg/kg			WG692229	11/14/13 16:01

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Ignitability	Deg. F	0.00	0.00	0.00	10	L667025-01	WG692022
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0	0.0	0.0	20	L668013-01	WG692231
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	0.0	0.0	0.0	20	L668013-01	WG692229

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Corrosivity		6.96	6.90	99.1	98.3-101.7	WG691782
Ignitability	Deg. F	82	82.0	100.	93-107	WG692022
Reactive CN (SW846 7.3.3.2)	mg/kg	60.6	0.103	0.170*	50-150	WG692231
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	100	88.0	88.0	70-130	WG692229

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Corrosivity		6.90	6.90	99.0	98.3-101.7	0.0	10	WG691782
Ignitability	Deg. F	82.0	82.0	100.	93-107	0.00	20	WG692022
Reactive CN (SW846 7.3.3.2)	mg/kg	0.0990	0.103	0*	50-150	3.96	20	WG692231
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	93.0	88.0	93.0	70-130	5.52	20	WG692229

Batch number /Run number / Sample number cross reference

WG691782: R2853087: L668013-
WG692022: R2853423: L668013-
WG692231: R2854349: L668013-
WG692229: R2854362: L668013-

* * 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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID **MB-10262** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **10262** RunNo: **14682**
Prep Date: **11/11/2013** Analysis Date: **11/11/2013** SeqNo: **423896** 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	9.9		10.00		98.7	66	131			

Sample ID **LCS-10262** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **10262** RunNo: **14682**
Prep Date: **11/11/2013** Analysis Date: **11/11/2013** SeqNo: **423898** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.5	62.1	127			
Surr: DNOP	4.7		5.000		94.1	66	131			

Sample ID **MB-10315** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **10315** RunNo: **14753**
Prep Date: **11/13/2013** Analysis Date: **11/13/2013** SeqNo: **424980** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		85.9	66	131			

Sample ID **LCS-10315** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **10315** RunNo: **14753**
Prep Date: **11/13/2013** Analysis Date: **11/13/2013** SeqNo: **425003** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.7	66	131			

Sample ID **MB-10262** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **10262** RunNo: **14760**
Prep Date: **11/11/2013** Analysis Date: **11/13/2013** SeqNo: **425187** 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	9.2		10.00		91.6	66	131			

Sample ID **LCS-10262** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **10262** RunNo: **14760**
Prep Date: **11/11/2013** Analysis Date: **11/13/2013** SeqNo: **425188** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID	**LCS-10262**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**10262**	RunNo:	**14760**
Prep Date:	**11/11/2013**	Analysis Date:	**11/13/2013**	SeqNo:	**425188** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.7	62.1	127			
Surr: DNOP	4.5		5.000		90.3	66	131			

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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID	**MB-10281**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**10281**	RunNo:	**14740**				
Prep Date:	**11/11/2013**	Analysis Date:	**11/12/2013**	SeqNo:	**424578**	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	920		1000		92.4	74.5	129			

Sample ID	**LCS-10281**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**10281**	RunNo:	**14740**				
Prep Date:	**11/11/2013**	Analysis Date:	**11/12/2013**	SeqNo:	**424579**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.9	74.5	126			
Surr: BFB	980		1000		98.2	74.5	129			

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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID **MB-10281** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **PBS** Batch ID: **10281** RunNo: **14754**
Prep Date: **11/11/2013** Analysis Date: **11/12/2013** SeqNo: **424607** 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	0.53		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.46		0.5000		91.5	70	130			

Sample ID **lcs-10281** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **LCSS** Batch ID: **10281** RunNo: **14754**
Prep Date: **11/11/2013** Analysis Date: **11/12/2013** SeqNo: **424608** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	112	70	130			
Chlorobenzene	ND	10	1.000	0	99.6	70	130			
1,1-Dichloroethene	1.2	0.070	1.000	0	120	69.3	131			
Trichloroethene (TCE)	0.95	0.050	1.000	0	95.2	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.2	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.5	70	130			
Surr: Toluene-d8	0.45		0.5000		89.0	70	130			

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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID	**MB-10302**	SampType:	**MBLK**	TestCode:	**MERCURY, TCLP**
Client ID:	**PBW**	Batch ID:	**10302**	RunNo:	**14774**
Prep Date:	**11/12/2013**	Analysis Date:	**11/13/2013**	SeqNo:	**425417** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID	**LCS-10302**	SampType:	**LCS**	TestCode:	**MERCURY, TCLP**
Client ID:	**LCSW**	Batch ID:	**10302**	RunNo:	**14774**
Prep Date:	**11/12/2013**	Analysis Date:	**11/13/2013**	SeqNo:	**425418** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	102	80	120			

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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID **MB-10304** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **10304** RunNo: **14762**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425010** 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-10304** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **10304** RunNo: **14762**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425011** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	96.7	80	120			
Barium	ND	100	0.5000	0	87.8	80	120			
Cadmium	ND	1.0	0.5000	0	96.5	80	120			
Chromium	ND	5.0	0.5000	0	89.3	80	120			
Lead	ND	5.0	0.5000	0	85.0	80	120			
Selenium	ND	1.0	0.5000	0	94.2	80	120			
Silver	ND	5.0	0.1000	0	99.9	80	120			

Sample ID **1311380-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit** Batch ID: **10304** RunNo: **14762**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425032** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	94.4	75	125			
Barium	ND	100	0.5000	2.968	84.1	75	125			
Cadmium	ND	1.0	0.5000	0	94.0	75	125			
Chromium	ND	5.0	0.5000	0	84.3	75	125			
Lead	ND	5.0	0.5000	0	79.7	75	125			
Selenium	ND	1.0	0.5000	0	83.7	75	125			
Silver	ND	5.0	0.1000	0	98.4	75	125			

Sample ID **1311380-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit** Batch ID: **10304** RunNo: **14762**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	98.5	75	125	0	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#: **1311380**
15-Nov-13

Client: Western Refining Southwest, Gallup
Project: Wash Pad Evacuation Pit

Sample ID **1311380-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit** Batch ID: **10304** RunNo: **14762**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	2.968	79.8	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	94.3	75	125	0	20	
Chromium	ND	5.0	0.5000	0	84.4	75	125	0	20	
Lead	ND	5.0	0.5000	0	80.1	75	125	0	20	
Selenium	ND	1.0	0.5000	0	84.7	75	125	0	20	
Silver	ND	5.0	0.1000	0	97.5	75	125	0	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		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1311380 RcptNo: 1

Received by/date: 11/11/13

Logged By: **Lindsay Mangin** 11/11/2013 12:20:00 PM

Completed By: **Lindsay Mangin** 11/11/2013 12:47:29 PM

Reviewed By: 11/11/13

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? 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° 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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

Mailing Address: 32 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation

☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush _____

Project Name:

Wash Pad Evacuation Pit

Project #:

Wash Pad Evacuation Pit

Project Manager:

Beck Larsen

Sampler: AD/JT

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311380	BTEX + MTBE + TMB's (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIM)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals			Air Bubbles (Y or N)
11/8/2013	**12:15**	**Soil**	**Wash Pad Pit**	**9 oz - 4**	**N/A**	-001			X							X		X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-11-13	1220 ~~09:30~~			11/11/13	1220
Date:	Time:	Relinquished by:	Received by:	Date	Time

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.

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

October 04, 2013

Beck Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Pit Behind T-101-102 OrderNo.: 1309D69

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/27/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1309D69**
Date Reported: **10/4/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit Behind T 101-102
Project: Pit Behind T-101-102
Collection Date: 9/26/2013 1:30:00 PM
Lab ID: 1309D69-001 **Matrix:** SOIL **Received Date:** 9/27/2013 1:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	1600	100		mg/Kg	10	10/1/2013 4:55:38 PM	9576
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	10/1/2013 4:55:38 PM	9576
Surr: DNOP	0	63-147	S	%REC	10	10/1/2013 4:55:38 PM	9576
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	87	20		mg/Kg	4	10/2/2013 12:47:50 AM	9556
Surr: BFB	118	80-120		%REC	4	10/2/2013 12:47:50 AM	9556
MERCURY, TCLP						Analyst:	**IDC**
Mercury	ND	0.020		mg/L	1	10/2/2013 9:44:07 AM	9587
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	10/3/2013 4:36:20 PM	9625
Barium	ND	100		mg/L	5	10/3/2013 4:39:29 PM	9625
Cadmium	ND	1.0		mg/L	1	10/3/2013 4:36:20 PM	9625
Chromium	ND	5.0		mg/L	1	10/3/2013 4:36:20 PM	9625
Lead	ND	5.0		mg/L	1	10/3/2013 4:36:20 PM	9625
Selenium	ND	1.0		mg/L	1	10/3/2013 4:36:20 PM	9625
Silver	ND	5.0		mg/L	1	10/3/2013 4:36:20 PM	9625
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**JMP**
Benzene	ND	0.50		ppm	10	10/1/2013 12:25:08 PM	9556
1,2-Dichloroethane (EDC)	ND	0.50		ppm	10	10/1/2013 12:25:08 PM	9556
2-Butanone	ND	200		ppm	10	10/1/2013 12:25:08 PM	9556
Carbon tetrachloride	ND	0.50		ppm	10	10/1/2013 12:25:08 PM	9556
Chlorobenzene	ND	100		ppm	10	10/1/2013 12:25:08 PM	9556
Chloroform	ND	6.0		ppm	10	10/1/2013 12:25:08 PM	9556
1,4-Dichlorobenzene	ND	7.5		ppm	10	10/1/2013 12:25:08 PM	9556
1,1-Dichloroethene	ND	0.70		ppm	10	10/1/2013 12:25:08 PM	9556
Tetrachloroethene (PCE)	ND	0.70		ppm	10	10/1/2013 12:25:08 PM	9556
Trichloroethene (TCE)	ND	0.50		ppm	10	10/1/2013 12:25:08 PM	9556
Vinyl chloride	ND	0.20		ppm	10	10/1/2013 12:25:08 PM	9556
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	10	10/1/2013 12:25:08 PM	9556
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	10	10/1/2013 12:25:08 PM	9556
Surr: Dibromofluoromethane	93.8	70-130		%REC	10	10/1/2013 12:25:08 PM	9556
Surr: Toluene-d8	95.9	70-130		%REC	10	10/1/2013 12:25:08 PM	9556

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 #: 131001012
Project Name: 1309D69

Analytical Results Report

Sample Number	131001012-001	**Sampling Date**	9/26/2013	**Date/Time Received**	10/1/2013	11:32 AM	
Client Sample ID	1309D69-001B / PIT BEHIND T	**Sampling Time**	1:30 PM	**Extraction Date**			
Matrix	Soil	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	2.73	mg/Kg	0.25	10/3/2013	CRW	SW846 CH7	
Ignitability	Negative			10/2/2013	JWC	EPA 1030	
pH	8.55	ph Units		10/2/2013	AJT	EPA 9045	
Reactive sulfide	ND	mg/kg	19.7	10/3/2013	ETL	SW846 CH7	
%moisture	20.9	Percent		10/2/2013	KFG	%moisture	

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; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1309D69**
04-Oct-13

Client: Western Refining Southwest, Gallup
Project: Pit Behind T-101-102

Sample ID	**MB-9576**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Diesel Range Organics**		
Client ID:	**PBS**	Batch ID:	**9576**	RunNo:	**13723**		
Prep Date:	**10/1/2013**	Analysis Date:	**10/1/2013**	SeqNo:	**391935**	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	9.7		10.00		96.8	63	147			

Sample ID	**LCS-9576**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range Organics**		
Client ID:	**LCSS**	Batch ID:	**9576**	RunNo:	**13723**		
Prep Date:	**10/1/2013**	Analysis Date:	**10/1/2013**	SeqNo:	**391959**	Units:	**mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.0	77.1	128			
Surr: DNOP	5.1		5.000		102	63	147			

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#: **1309D69**
04-Oct-13

Client: Western Refining Southwest, Gallup
Project: Pit Behind T-101-102

Sample ID	**MB-9556**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBS**	Batch ID:	**9556**	RunNo:	**13760**
Prep Date:	**9/30/2013**	Analysis Date:	**10/1/2013**	SeqNo:	**392566** 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		92.8	80	120			

Sample ID	**LCS-9556**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSS**	Batch ID:	**9556**	RunNo:	**13760**
Prep Date:	**9/30/2013**	Analysis Date:	**10/1/2013**	SeqNo:	**392567** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	74.5	126			
Surr: BFB	1000		1000		100	80	120			

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#: **1309D69**
04-Oct-13

Client: Western Refining Southwest, Gallup
Project: Pit Behind T-101-102

Sample ID **mb-9556** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **PBS** Batch ID: **9556** RunNo: **13753**
Prep Date: **9/30/2013** Analysis Date: **10/1/2013** SeqNo: **392278** 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	0.46		0.5000		92.6	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.5	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.9	70	130			
Surr: Toluene-d8	0.49		0.5000		98.7	70	130			

Sample ID **lcs-9556** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **LCSS** Batch ID: **9556** RunNo: **13753**
Prep Date: **9/30/2013** Analysis Date: **10/1/2013** SeqNo: **392279** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	102	70	130			
Chlorobenzene	ND	10	1.000	0	97.3	70	130			
1,1-Dichloroethene	1.1	0.070	1.000	0	114	69.3	131			
Trichloroethene (TCE)	0.98	0.050	1.000	0	98.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.2	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.6	70	130			
Surr: Toluene-d8	0.48		0.5000		96.5	70	130			

Sample ID **1309d69-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **Pit Behind T 101-10** Batch ID: **9556** RunNo: **13753**
Prep Date: **9/30/2013** Analysis Date: **10/1/2013** SeqNo: **392281** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.4	0.50	0.9970	0.1836	118	65.1	127			
Chlorobenzene	ND	100	0.9970	0	102	66.8	129			
1,1-Dichloroethene	1.4	0.70	0.9970	0.08074	130	44.1	148			
Trichloroethene (TCE)	1.3	0.50	0.9970	0.08154	123	63.2	122			S
Surr: 1,2-Dichloroethane-d4	4.8		4.985		96.4	70	130			

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#: **1309D69**
04-Oct-13

Client: Western Refining Southwest, Gallup
Project: Pit Behind T-101-102

Sample ID **1309d69-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **Pit Behind T 101-10** Batch ID: **9556** RunNo: **13753**
Prep Date: **9/30/2013** Analysis Date: **10/1/2013** SeqNo: **392281** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	4.5		4.985		89.7	70	130			
Surr: Dibromofluoromethane	5.0		4.985		99.7	70	130			
Surr: Toluene-d8	4.5		4.985		91.1	70	130			

Sample ID **1309d69-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **Pit Behind T 101-10** Batch ID: **9556** RunNo: **13753**
Prep Date: **9/30/2013** Analysis Date: **10/1/2013** SeqNo: **392282** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.50	0.9990	0.1836	96.9	65.1	127	16.6	20	
Chlorobenzene	ND	100	0.9990	0	82.0	66.8	129	0	20	R
1,1-Dichloroethene	1.2	0.70	0.9990	0.08074	115	44.1	148	11.4	20	
Trichloroethene (TCE)	1.2	0.50	0.9990	0.08154	108	63.2	122	12.0	20	
Surr: 1,2-Dichloroethane-d4	4.9		4.995		98.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	4.4		4.995		88.6	70	130	0	0	
Surr: Dibromofluoromethane	4.9		4.995		97.9	70	130	0	0	
Surr: Toluene-d8	4.6		4.995		92.1	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#: **1309D69**
04-Oct-13

Client: Western Refining Southwest, Gallup
Project: Pit Behind T-101-102

Sample ID **MB-9587** SampType: **mblk** TestCode: **MERCURY, TCLP**
Client ID: **PBW** Batch ID: **9587** RunNo: **13772**
Prep Date: **10/1/2013** Analysis Date: **10/2/2013** SeqNo: **392852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-9587** SampType: **lcs** TestCode: **MERCURY, TCLP**
Client ID: **LCSW** Batch ID: **9587** RunNo: **13772**
Prep Date: **10/1/2013** Analysis Date: **10/2/2013** SeqNo: **392853** 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 **1309D69-001AMS** SampType: **ms** TestCode: **MERCURY, TCLP**
Client ID: **Pit Behind T 101-10** Batch ID: **9587** RunNo: **13772**
Prep Date: **10/1/2013** Analysis Date: **10/2/2013** SeqNo: **392855** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	98.9	75	125			

Sample ID **1309D69-001AMSD** SampType: **msd** TestCode: **MERCURY, TCLP**
Client ID: **Pit Behind T 101-10** Batch ID: **9587** RunNo: **13772**
Prep Date: **10/1/2013** Analysis Date: **10/2/2013** SeqNo: **392856** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	97.8	75	125	0	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#: **1309D69**
04-Oct-13

Client: Western Refining Southwest, Gallup
Project: Pit Behind T-101-102

Sample ID **MB-9625** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **9625** RunNo: **13816**
Prep Date: **10/3/2013** Analysis Date: **10/3/2013** SeqNo: **394771** 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-9625** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **9625** RunNo: **13816**
Prep Date: **10/3/2013** Analysis Date: **10/3/2013** SeqNo: **394772** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	107	80	120			
Barium	ND	100	0.5000	0	97.0	80	120			
Cadmium	ND	1.0	0.5000	0	102	80	120			
Chromium	ND	5.0	0.5000	0	95.4	80	120			
Lead	ND	5.0	0.5000	0	98.0	80	120			
Selenium	ND	1.0	0.5000	0	109	80	120			
Silver	ND	5.0	0.1000	0	90.6	80	120			

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

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: **1309D69** RcptNo: 1

Received by/date: AG 09/27/13

Logged By: **Michelle Garcia** **9/27/2013 1:40:00 PM** Michelle Garcia

Completed By: **Michelle Garcia** **9/27/2013 3:20:35 PM** Michelle Garcia

Reviewed By: KMS 9/27/13

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? 5.8

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? Yes ✔ No # of preserved bottles checked for pH: (<2 or >12 unless noted)
    (Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ✔ No Adjusted?
14. Is it clear what analyses were requested? Yes ✔ No
15. Were all holding times able to be met? Yes ✔ No Checked by:
    (If no, notify customer for authorization.)

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	5.8	Good	Not Present			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

Mailing Address: 32 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush

Project Name: Pit Behind T-101-102

Project #: Pit Behind T-101-102

Project Manager: Beck Larsen

Sampler: CTI

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1309D69	BTEX + MTBE + TMB's (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals - RCRA8 Per Ards		Air Bubbles (Y or N)
9/26/2013	13:30	Soil	Pit Behind T 101- 102	9 oz - 3	N/A	-001			X							X		X	X		

Date	Time	Relinquished by:	Received by:	Date	Time
09-27-13	12:00			9/27/13	13:40
9/27/13	13:40			09/27/13	1340

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.

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

July 08, 2013

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

RE: Soil/Tar Samples OrderNo.: 1306C03

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/28/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1306C03**
Date Reported: **7/8/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Excavated Soil/Tar/Pit Samp W
Project: Soil/Tar Samples
Collection Date: 6/26/2013 2:00:00 PM
Lab ID: 1306C03-001 **Matrix:** SOIL **Received Date:** 6/28/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**GSA**
Diesel Range Organics (DRO)	9200	1000		mg/Kg	100	6/29/2013 11:01:10 AM	8150
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	6/29/2013 11:01:10 AM	8150
Surr: DNOP	0	63-147	S	%REC	100	6/29/2013 11:01:10 AM	8150
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2900	230		mg/Kg	50	7/1/2013 12:44:38 PM	8156
Surr: BFB	170	80-120	S	%REC	50	7/1/2013 12:44:38 PM	8156
MERCURY, TCLP						Analyst:	**JLF**
Mercury	ND	0.020		mg/L	1	7/3/2013 10:12:41 AM	8201
EPA METHOD 6010B: TCLP METALS						Analyst:	**JLF**
Arsenic	ND	5.0		mg/L	1	7/3/2013 5:03:10 PM	8219
Barium	ND	100		mg/L	5	7/3/2013 5:11:32 PM	8219
Cadmium	ND	1.0		mg/L	1	7/3/2013 5:03:10 PM	8219
Chromium	ND	5.0		mg/L	1	7/3/2013 5:03:10 PM	8219
Lead	ND	5.0		mg/L	1	7/3/2013 5:03:10 PM	8219
Selenium	ND	1.0		mg/L	1	7/5/2013 1:12:47 PM	8219
Silver	ND	5.0		mg/L	1	7/3/2013 5:03:10 PM	8219
EPA METHOD 8270C TCLP						Analyst:	**JDC**
2-Methylphenol	ND	200		mg/L	1	7/2/2013 2:20:21 PM	8198
3+4-Methylphenol	ND	200		mg/L	1	7/2/2013 2:20:21 PM	8198
Phenol	ND	200		mg/L	1	7/2/2013 2:20:21 PM	8198
2,4-Dinitrotoluene	ND	0.13		mg/L	1	7/2/2013 2:20:21 PM	8198
Hexachlorobenzene	ND	0.13		mg/L	1	7/2/2013 2:20:21 PM	8198
Hexachlorobutadiene	ND	0.50		mg/L	1	7/2/2013 2:20:21 PM	8198
Hexachloroethane	ND	3.0		mg/L	1	7/2/2013 2:20:21 PM	8198
Nitrobenzene	ND	2.0		mg/L	1	7/2/2013 2:20:21 PM	8198
Pentachlorophenol	ND	100		mg/L	1	7/2/2013 2:20:21 PM	8198
Pyridine	ND	5.0		mg/L	1	7/2/2013 2:20:21 PM	8198
2,4,5-Trichlorophenol	ND	400		mg/L	1	7/2/2013 2:20:21 PM	8198
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	7/2/2013 2:20:21 PM	8198
Cresols, Total	ND	200		mg/L	1	7/2/2013 2:20:21 PM	8198
Surr: 2,4,6-Tribromophenol	74.2	18.7-148		%REC	1	7/2/2013 2:20:21 PM	8198
Surr: 2-Fluorobiphenyl	90.4	53.8-117		%REC	1	7/2/2013 2:20:21 PM	8198
Surr: 2-Fluorophenol	44.3	10.5-106		%REC	1	7/2/2013 2:20:21 PM	8198
Surr: 4-Terphenyl-d14	71.0	43.8-108		%REC	1	7/2/2013 2:20:21 PM	8198
Surr: Nitrobenzene-d5	104	36.7-128		%REC	1	7/2/2013 2:20:21 PM	8198
Surr: Phenol-d5	41.4	18-70.1		%REC	1	7/2/2013 2:20:21 PM	8198
VOLATILES BY 8260B/1311						Analyst:	**DAM**
Benzene	ND	0.50		mg/L	1	7/3/2013 2:52:54 AM	8191

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Excavated Soil/Tar/Pit Samp W
Project: Soil/Tar Samples
Collection Date: 6/26/2013 2:00:00 PM
Lab ID: 1306C03-001
Matrix: SOIL
Received Date: 6/28/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
VOLATILES BY 8260B/1311						Analyst: **DAM**	
2-Butanone	ND	10		mg/L	1	7/3/2013 2:52:54 AM	8191
Carbon Tetrachloride	ND	0.50		mg/L	1	7/3/2013 2:52:54 AM	8191
Chlorobenzene	ND	100		mg/L	1	7/3/2013 2:52:54 AM	8191
Chloroform	ND	6.0		mg/L	1	7/3/2013 2:52:54 AM	8191
1,4-Dichlorobenzene	ND	7.5		mg/L	1	7/3/2013 2:52:54 AM	8191
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	7/3/2013 2:52:54 AM	8191
1,1-Dichloroethene	ND	0.70		mg/L	1	7/3/2013 2:52:54 AM	8191
Hexachlorobutadiene	ND	0.50		mg/L	1	7/3/2013 2:52:54 AM	8191
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	7/3/2013 2:52:54 AM	8191
Trichloroethene (TCE)	ND	0.50		mg/L	1	7/3/2013 2:52:54 AM	8191
Vinyl chloride	ND	0.20		mg/L	1	7/3/2013 2:52:54 AM	8191
Surr: 1,2-Dichloroethane-d4	93.7	69.9-130		%REC	1	7/3/2013 2:52:54 AM	8191
Surr: 4-Bromofluorobenzene	91.8	71.2-123		%REC	1	7/3/2013 2:52:54 AM	8191
Surr: Dibromofluoromethane	91.5	73.9-134		%REC	1	7/3/2013 2:52:54 AM	8191
Surr: Toluene-d8	91.1	81.9-122		%REC	1	7/3/2013 2:52:54 AM	8191

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

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

July 05, 2013

ESC Sample # : L644426-01

Date Received : July 02, 2013
Description :

Site ID :

Sample ID : 1306C03-001D EXCAVATED SOIL/TAR/PIT SAMP

Project # :

Collected By :
Collection Date : 06/26/13 14:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Corrosivity	Non-Corrosive			9045D	07/05/13	1
Ignitability	See Footnote		Deg. F	D93/1010A	07/03/13	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg	9012B	07/05/13	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg	9034/9030B	07/03/13	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: 07/05/13 15:26 Printed: 07/05/13 15:26
L644426-01 (IGNITABILITY) - Did Not Ignite @ 170 F

ESC LAB SCIENCES
YOUR LAB OF CHOICE

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

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L644426

July 05, 2013

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Reactive Sulf.(SW846 7.3.4.1)	< 25	mg/kg			WG670056	07/03/13 08:50
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG670058	07/05/13 14:28

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Ignitability	Deg. F	0	0	0	10	L644426-01	WG670041
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	60.0	61.0	1.15	20	L644267-41	WG670056
Corrosivity		0	0	0	10	L644426-01	WG670314

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Ignitability	Deg. F	82	82.0	100.	93-107	WG670041
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	100	75.0	75.0	70-130	WG670056
Corrosivity		5.79	5.80	100.	98.3-101.7	WG670314

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Ignitability	Deg. F	83.0	82.0	101.	93-107	1.21	20	WG670041
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	75.0	75.0	75.0	70-130	0	20	WG670056
Corrosivity		5.80	5.80	100.	98.3-101.7	0	10	WG670314

Batch number /Run number / Sample number cross reference

WG670041: R2732861: L644426-01
WG670056: R2732941: L644426-01
WG670314: R2734264: L644426-01
WG670058: R2734543: L644426-01

* * 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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **MB-8150**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **8150**	RunNo: **11622**
Prep Date: **6/28/2013**	Analysis Date: **6/28/2013**	SeqNo: **330163** 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	11		10.00		107	63	147			

Sample ID **LCS-8150**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **8150**	RunNo: **11622**
Prep Date: **6/28/2013**	Analysis Date: **6/28/2013**	SeqNo: **330219** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	115	77.1	128			
Surr: DNOP	5.7		5.000		114	63	147			

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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID	**MB-8156**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBS**	Batch ID:	**8156**	RunNo:	**11690**
Prep Date:	**6/28/2013**	Analysis Date:	**7/1/2013**	SeqNo:	**331756** 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	900		1000		89.8	80	120			

Sample ID	**LCS-8156**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSS**	Batch ID:	**8156**	RunNo:	**11690**
Prep Date:	**6/28/2013**	Analysis Date:	**7/1/2013**	SeqNo:	**331757** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.6	62.6	136			
Surr: BFB	970		1000		97.4	80	120			

Qualifiers:

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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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **mb-8191** SampType: **MBLK** TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS** Batch ID: **8191** RunNo: **11708**
Prep Date: **7/1/2013** Analysis Date: **7/3/2013** SeqNo: **332703** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	10								
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	0.18		0.2000		90.4	69.9	130			
Surr: 4-Bromofluorobenzene	0.21		0.2000		104	71.2	123			
Surr: Dibromofluoromethane	0.18		0.2000		91.8	73.9	134			
Surr: Toluene-d8	0.19		0.2000		94.3	81.9	122			

Sample ID **lcs-8191** SampType: **LCS** TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS** Batch ID: **8191** RunNo: **11708**
Prep Date: **7/1/2013** Analysis Date: **7/3/2013** SeqNo: **332704** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.40	0.020	0.4000	0	100	51.1	171			
Chlorobenzene	0.42	0.020	0.4000	0	104	36.1	191			
1,1-Dichloroethene	0.39	0.020	0.4000	0	98.0	49.1	162			
Trichloroethene (TCE)	0.39	0.020	0.4000	0	96.7	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.18		0.2000		91.4	69.9	130			
Surr: 4-Bromofluorobenzene	0.20		0.2000		98.7	71.2	123			
Surr: Dibromofluoromethane	0.18		0.2000		91.5	73.9	134			
Surr: Toluene-d8	0.19		0.2000		93.5	81.9	122			

Sample ID **1306c03-001ams** SampType: **MS** TestCode: **Volatiles by 8260B/1311**
Client ID: **Excavated Soil/Tar/** Batch ID: **8191** RunNo: **11708**
Prep Date: **7/1/2013** Analysis Date: **7/3/2013** SeqNo: **332705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.020	0.4000	0.3534	109	51.1	171			
Chlorobenzene	0.42	0.020	0.4000	0	105	36.1	191			
1,1-Dichloroethene	0.38	0.020	0.4000	0	94.9	49.1	162			
Trichloroethene (TCE)	0.38	0.020	0.4000	0	94.5	41.2	166			

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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **1306c03-001ams** SampType: **MS** TestCode: **Volatiles by 8260B/1311**
Client ID: **Excavated Soil/Tar/** Batch ID: **8191** RunNo: **11708**
Prep Date: **7/1/2013** Analysis Date: **7/3/2013** SeqNo: **332705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		92.9	69.9	130			
Surr: 4-Bromofluorobenzene	0.19		0.2000		94.0	71.2	123			
Surr: Dibromofluoromethane	0.18		0.2000		91.9	73.9	134			
Surr: Toluene-d8	0.18		0.2000		91.1	81.9	122			

Sample ID **1306c03-001amsd** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**
Client ID: **Excavated Soil/Tar/** Batch ID: **8191** RunNo: **11708**
Prep Date: **7/1/2013** Analysis Date: **7/3/2013** SeqNo: **332706** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.76	0.020	0.4000	0.3534	102	51.1	171	3.68	0	
Chlorobenzene	0.43	0.020	0.4000	0	108	36.1	191	2.24	0	
1,1-Dichloroethene	0.36	0.020	0.4000	0	89.7	49.1	162	5.62	0	
Trichloroethene (TCE)	0.37	0.020	0.4000	0	93.5	41.2	166	1.01	0	
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		95.6	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	0.19		0.2000		93.8	71.2	123	0	0	
Surr: Dibromofluoromethane	0.19		0.2000		92.6	73.9	134	0	0	
Surr: Toluene-d8	0.19		0.2000		94.2	81.9	122	0	0	

Qualifiers:

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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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **MB-8198** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**
Client ID: **PBS** Batch ID: **8198** RunNo: **11711**
Prep Date: **7/2/2013** Analysis Date: **7/2/2013** SeqNo: **332621** 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: 2,4,6-Tribromophenol	0.14		0.2000		70.3	18.7	148			
Surr: 2-Fluorobiphenyl	0.077		0.1000		77.4	53.8	117			
Surr: 2-Fluorophenol	0.12		0.2000		62.4	10.5	106			
Surr: 4-Terphenyl-d14	0.058		0.1000		58.1	43.8	108			
Surr: Nitrobenzene-d5	0.077		0.1000		77.3	36.7	128			
Surr: Phenol-d5	0.13		0.2000		64.7	18	70.1			

Sample ID **LCS-8198** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS** Batch ID: **8198** RunNo: **11711**
Prep Date: **7/2/2013** Analysis Date: **7/2/2013** SeqNo: **332629** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.070	0.010	0.1000	0	69.9	32	109			
3+4-Methylphenol	0.17	0.010	0.2000	0	86.3	36.2	121			
2,4-Dinitrotoluene	0.11	0.010	0.1000	0	111	40	108			S
Hexachlorobenzene	0.082	0.010	0.1000	0	81.6	40.5	89			
Hexachlorobutadiene	0.071	0.010	0.1000	0	71.4	23	98.8			
Hexachloroethane	0.074	0.010	0.1000	0	73.8	20.9	104			
Nitrobenzene	0.091	0.010	0.1000	0	91.0	38.4	118			
Pentachlorophenol	0.082	0.010	0.1000	0	82.1	13	106			
Pyridine	0.059	0.010	0.1000	0	58.6	9.77	85.3			
2,4,5-Trichlorophenol	0.088	0.010	0.1000	0	87.9	19.6	118			
2,4,6-Trichlorophenol	0.089	0.010	0.1000	0	88.7	15.6	117			
Cresols, Total	0.24	0.010	0.3000	0	80.8	35.6	116			
Surr: 2,4,6-Tribromophenol	0.20		0.2000		98.8	18.7	148			
Surr: 2-Fluorobiphenyl	0.077		0.1000		77.2	53.8	117			
Surr: 2-Fluorophenol	0.11		0.2000		53.4	10.5	106			

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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **LCS-8198** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS** Batch ID: **8198** RunNo: **11711**
Prep Date: **7/2/2013** Analysis Date: **7/2/2013** SeqNo: **332629** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	0.072		0.1000		72.1	43.8	108			
Surr: Nitrobenzene-d5	0.085		0.1000		85.0	36.7	128			
Surr: Phenol-d5	0.082		0.2000		40.9	18	70.1			

Sample ID **1306C03-001Bms** SampType: **MS** TestCode: **EPA Method 8270C TCLP**
Client ID: **Excavated Soil/Tar/** Batch ID: **8198** RunNo: **11711**
Prep Date: **7/2/2013** Analysis Date: **7/2/2013** SeqNo: **332640** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.065	0.010	0.1000	0	65.4	43.9	95.3			
3+4-Methylphenol	0.16	0.010	0.2000	0	79.2	43.9	114			
2,4-Dinitrotoluene	0.090	0.010	0.1000	0	89.9	50.3	107			
Hexachlorobenzene	0.064	0.010	0.1000	0	64.5	47.9	89.7			
Hexachlorobutadiene	0.067	0.010	0.1000	0	67.1	26.7	93			
Hexachloroethane	0.068	0.010	0.1000	0	68.2	29.8	97.9			
Nitrobenzene	0.090	0.010	0.1000	0	89.7	42.7	115			
Pentachlorophenol	0.045	0.010	0.1000	0	44.7	12.4	108			
Pyridine	0.046	0.010	0.1000	0	45.5	7.85	93.6			
2,4,5-Trichlorophenol	0.068	0.010	0.1000	0	68.3	18.1	119			
2,4,6-Trichlorophenol	0.071	0.010	0.1000	0	70.8	10.4	123			
Cresols, Total	0.22	0.010	0.3000	0	74.6	45.5	107			
Surr: 2,4,6-Tribromophenol	0.14		0.2000		71.5	18.7	148			
Surr: 2-Fluorobiphenyl	0.073		0.1000		72.6	53.8	117			
Surr: 2-Fluorophenol	0.067		0.2000		33.5	10.5	106			
Surr: 4-Terphenyl-d14	0.060		0.1000		60.0	43.8	108			
Surr: Nitrobenzene-d5	0.089		0.1000		89.0	36.7	128			
Surr: Phenol-d5	0.084		0.2000		42.0	18	70.1			

Sample ID **1306C03-001Bmsd** SampType: **MSD** TestCode: **EPA Method 8270C TCLP**
Client ID: **Excavated Soil/Tar/** Batch ID: **8198** RunNo: **11711**
Prep Date: **7/2/2013** Analysis Date: **7/2/2013** SeqNo: **332641** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.064	0.010	0.1000	0	63.5	43.9	95.3	2.85	29.9	
3+4-Methylphenol	0.16	0.010	0.2000	0	77.8	43.9	114	1.76	29.9	
2,4-Dinitrotoluene	0.077	0.010	0.1000	0	76.9	50.3	107	15.6	33.1	
Hexachlorobenzene	0.058	0.010	0.1000	0	57.7	47.9	89.7	11.2	28.6	
Hexachlorobutadiene	0.062	0.010	0.1000	0	62.0	26.7	93	7.91	27.9	
Hexachloroethane	0.065	0.010	0.1000	0	64.5	29.8	97.9	5.46	17.8	
Nitrobenzene	0.075	0.010	0.1000	0	75.0	42.7	115	17.9	24.5	

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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **1306C03-001Bmsd** SampType: **MSD** TestCode: **EPA Method 8270C TCLP**
Client ID: **Excavated Soil/Tar/** Batch ID: **8198** RunNo: **11711**
Prep Date: **7/2/2013** Analysis Date: **7/2/2013** SeqNo: **332641** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Pentachlorophenol	0.067	0.010	0.1000	0	66.7	12.4	108	39.6	27.2	R
Pyridine	0.047	0.010	0.1000	0	47.3	7.85	93.6	3.79	47.7	
2,4,5-Trichlorophenol	0.066	0.010	0.1000	0	65.7	18.1	119	3.88	32	
2,4,6-Trichlorophenol	0.069	0.010	0.1000	0	68.6	10.4	123	3.10	25.4	
Cresols, Total	0.22	0.010	0.3000	0	73.1	45.5	107	2.08	29.9	
Surr: 2,4,6-Tribromophenol	0.15		0.2000		73.1	18.7	148	0	0	
Surr: 2-Fluorobiphenyl	0.064		0.1000		64.4	53.8	117	0	0	
Surr: 2-Fluorophenol	0.083		0.2000		41.6	10.5	106	0	0	
Surr: 4-Terphenyl-d14	0.052		0.1000		52.2	43.8	108	0	0	
Surr: Nitrobenzene-d5	0.077		0.1000		76.5	36.7	128	0	0	
Surr: Phenol-d5	0.11		0.2000		53.5	18	70.1	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
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID	**MB-8201**	SampType:	**MBLK**		TestCode:	**MERCURY, TCLP**					
Client ID:	**PBW**	Batch ID:	**8201**		RunNo:	**11721**					
Prep Date:	**7/2/2013**	Analysis Date:	**7/3/2013**		SeqNo:	**332977**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.020								

Sample ID	**LCS-8201**	SampType:	**LCS**		TestCode:	**MERCURY, TCLP**					
Client ID:	**LCSW**	Batch ID:	**8201**		RunNo:	**11721**					
Prep Date:	**7/2/2013**	Analysis Date:	**7/3/2013**		SeqNo:	**332978**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.020	0.005000	0	96.0	80	120			

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#: **1306C03**
08-Jul-13

Client: Western Refining Southwest, Gallup
Project: Soil/Tar Samples

Sample ID **MB-8219** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **8219** RunNo: **11740**
Prep Date: **7/3/2013** Analysis Date: **7/3/2013** SeqNo: **333473** 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								
Silver	ND	5.0								

Sample ID **LCS-8219** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **8219** RunNo: **11740**
Prep Date: **7/3/2013** Analysis Date: **7/3/2013** SeqNo: **333474** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	113	80	120			
Barium	ND	100	0.5000	0	99.2	80	120			
Cadmium	ND	1.0	0.5000	0	102	80	120			
Chromium	ND	5.0	0.5000	0	100	80	120			
Lead	ND	5.0	0.5000	0	96.3	80	120			
Silver	ND	5.0	0.1000	0	108	80	120			

Sample ID **MB-8219** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **8219** RunNo: **11757**
Prep Date: **7/3/2013** Analysis Date: **7/5/2013** SeqNo: **334210** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	1.0								

Sample ID **LCS-8219** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **8219** RunNo: **11757**
Prep Date: **7/3/2013** Analysis Date: **7/5/2013** SeqNo: **334211** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	1.0	0.5000	0	90.1	80	120			

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

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: 1306C03 RcptNo: 1

Received by/date: MG 06/28/13

Logged By: **Michelle Garcia** 6/28/2013 8:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 6/28/2013 8:56:41 AM Michelle Garcia

Reviewed By: IO 06/28/13

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

Mailing Address: RT 3 Box 7

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush _____

Project Name:

Soil/Tar Samples

Project #: Pit Sample Excavated Area

Drainage Ditch West of Tank 101 ` ` 102

Project Manager:

Beck Larsen

Sampler: Envirotech

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1306603	BTEX + MTBE + TMB's (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals RCRA 8			Air Bubbles (Y or N)
6/26/2013	14:00	Soil ~~H2O~~	Excavated Soil/Tar/Pit Sample west of Tank 101 - 102 Area	9 oz - 4	N/A	-001			X							X	X	X	X			
		Hg 06/28																				

Date: 06-27-13 Time: 12:00 ~~12:00~~ AM Relinquished by: Alvin Dorsey

Received by: Date Time 06/28/13 0800

Date: Time: Relinquished by:

Received by: Date Time

Remarks: Excavated Area Soil Sample 1 (06-27-2013)

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.

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

July 19, 2013

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

RE: Excavation Behind Tank OrderNo.: 1307524

Dear Beck Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/12/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1307524**
Date Reported: **7/19/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Soil Pile Behind 101/102
Project: Excavation Behind Tank
Collection Date: 7/10/2013 3:30:00 PM
Lab ID: 1307524-001 **Matrix:** SOIL **Received Date:** 7/12/2013 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	40000	1000		mg/Kg	100	7/15/2013 4:21:37 PM	8339
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	7/15/2013 4:21:37 PM	8339
Surr: DNOP	0	63-147	S	%REC	100	7/15/2013 4:21:37 PM	8339
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DAM**
Gasoline Range Organics (GRO)	230	46		mg/Kg	10	7/15/2013 4:10:25 PM	8345
Surr: BFB	126	80-120	S	%REC	10	7/15/2013 4:10:25 PM	8345
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/17/2013 5:40:38 PM	8429
EPA METHOD 6010B: TCLP METALS						Analyst:	**JLF**
Arsenic	ND	5.0		mg/L	1	7/18/2013 4:40:01 PM	8438
Barium	ND	100		mg/L	5	7/18/2013 3:22:07 PM	8438
Cadmium	ND	1.0		mg/L	1	7/18/2013 2:47:10 PM	8438
Chromium	ND	5.0		mg/L	1	7/18/2013 2:47:10 PM	8438
Lead	ND	5.0		mg/L	1	7/18/2013 2:47:10 PM	8438
Selenium	ND	1.0		mg/L	1	7/19/2013 11:22:21 AM	8438
Silver	ND	5.0		mg/L	1	7/18/2013 2:47:10 PM	8438
EPA METHOD 8270C TCLP						Analyst:	**JDC**
2-Methylphenol	ND	200		mg/L	1	7/16/2013 6:21:47 PM	8399
3+4-Methylphenol	ND	200		mg/L	1	7/16/2013 6:21:47 PM	8399
Phenol	ND	200		mg/L	1	7/16/2013 6:21:47 PM	8399
2,4-Dinitrotoluene	ND	0.13		mg/L	1	7/16/2013 6:21:47 PM	8399
Hexachlorobenzene	ND	0.13		mg/L	1	7/16/2013 6:21:47 PM	8399
Hexachlorobutadiene	ND	0.50		mg/L	1	7/16/2013 6:21:47 PM	8399
Hexachloroethane	ND	3.0		mg/L	1	7/16/2013 6:21:47 PM	8399
Nitrobenzene	ND	2.0		mg/L	1	7/16/2013 6:21:47 PM	8399
Pentachlorophenol	ND	100		mg/L	1	7/16/2013 6:21:47 PM	8399
Pyridine	ND	5.0		mg/L	1	7/16/2013 6:21:47 PM	8399
2,4,5-Trichlorophenol	ND	400		mg/L	1	7/16/2013 6:21:47 PM	8399
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	7/16/2013 6:21:47 PM	8399
Cresols, Total	ND	200		mg/L	1	7/16/2013 6:21:47 PM	8399
Surr: 2,4,6-Tribromophenol	64.2	26.8-116		%REC	1	7/16/2013 6:21:47 PM	8399
Surr: 2-Fluorobiphenyl	70.4	47.7-94		%REC	1	7/16/2013 6:21:47 PM	8399
Surr: 2-Fluorophenol	57.5	17.9-87.1		%REC	1	7/16/2013 6:21:47 PM	8399
Surr: 4-Terphenyl-d14	81.5	39.2-96.2		%REC	1	7/16/2013 6:21:47 PM	8399
Surr: Nitrobenzene-d5	85.4	49.8-105		%REC	1	7/16/2013 6:21:47 PM	8399
Surr: Phenol-d5	41.7	22.3-60.5		%REC	1	7/16/2013 6:21:47 PM	8399
VOLATILES BY 8260B/1311						Analyst:	**JMP**
Benzene	ND	0.50		mg/L	1	7/17/2013 3:37:37 AM	8390

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

Qualifiers:

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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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Soil Pile Behind 101/102
Project: Excavation Behind Tank
Collection Date: 7/10/2013 3:30:00 PM
Lab ID: 1307524-001
Matrix: SOIL
Received Date: 7/12/2013 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
VOLATILES BY 8260B/1311						Analyst: **JMP**	
2-Butanone	ND	10		mg/L	1	7/17/2013 3:37:37 AM	8390
Carbon Tetrachloride	ND	0.50		mg/L	1	7/17/2013 3:37:37 AM	8390
Chlorobenzene	ND	100		mg/L	1	7/17/2013 3:37:37 AM	8390
Chloroform	ND	6.0		mg/L	1	7/17/2013 3:37:37 AM	8390
1,4-Dichlorobenzene	ND	7.5		mg/L	1	7/17/2013 3:37:37 AM	8390
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	7/17/2013 3:37:37 AM	8390
1,1-Dichloroethene	ND	0.70		mg/L	1	7/17/2013 3:37:37 AM	8390
Hexachlorobutadiene	ND	0.50		mg/L	1	7/17/2013 3:37:37 AM	8390
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	7/17/2013 3:37:37 AM	8390
Trichloroethene (TCE)	ND	0.50		mg/L	1	7/17/2013 3:37:37 AM	8390
Vinyl chloride	ND	0.20		mg/L	1	7/17/2013 3:37:37 AM	8390
Surr: 1,2-Dichloroethane-d4	90.3	69.9-130		%REC	1	7/17/2013 3:37:37 AM	8390
Surr: 4-Bromofluorobenzene	89.6	71.2-123		%REC	1	7/17/2013 3:37:37 AM	8390
Surr: Dibromofluoromethane	92.5	73.9-134		%REC	1	7/17/2013 3:37:37 AM	8390
Surr: Toluene-d8	94.6	81.9-122		%REC	1	7/17/2013 3:37:37 AM	8390

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

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 #: 130716017
Project Name: 1307524

Analytical Results Report

Sample Number	130716017-001	**Sampling Date**	7/10/2013	**Date/Time Received**	7/16/2013	12:25 PM
Client Sample ID	1307524-001B / SOIL PILE BEHIND 101/102	**Sampling Time**	3:30 PM			
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	45.6	mg/Kg	3.2	7/18/2013	CRW	SW846 CH7	
Ignitability	Negative			7/17/2013	JWC	EPA 1030	
pH	8.83	ph Units		7/17/2013	AJT	EPA 9045	
Reactive sulfide	46.0	mg/kg	10	7/18/2013	AJT	SW846 CH7	
%moisture	21.4	Percent		7/16/2013	AJT	%moisture	

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; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **MB-8339** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **8339** RunNo: **11878**
Prep Date: **7/12/2013** Analysis Date: **7/12/2013** SeqNo: **337805** 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	7.9		10.00		79.3	63	147			

Sample ID: **LCS-8339** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **8339** RunNo: **11878**
Prep Date: **7/12/2013** Analysis Date: **7/12/2013** SeqNo: **337806** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.1	77.1	128			
Surr: DNOP	4.6		5.000		92.4	63	147			

Sample ID: **MB-8347** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **8347** RunNo: **11922**
Prep Date: **7/12/2013** Analysis Date: **7/15/2013** SeqNo: **339456** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		85.7	63	147			

Sample ID: **LCS-8347** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **8347** RunNo: **11922**
Prep Date: **7/12/2013** Analysis Date: **7/15/2013** SeqNo: **339457** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.9	63	147			

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#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **MB-8345** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **8345** RunNo: **11935**
Prep Date: **7/12/2013** Analysis Date: **7/15/2013** SeqNo: **339766** 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	950		1000		95.3	80	120			

Sample ID: **LCS-8345** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **8345** RunNo: **11935**
Prep Date: **7/12/2013** Analysis Date: **7/15/2013** SeqNo: **339767** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.6	62.6	136			
Surr: BFB	1000		1000		104	80	120			

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#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **mb-8390** SampType: **MBLK** TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS** Batch ID: **8390** RunNo: **11981**
Prep Date: **7/15/2013** Analysis Date: **7/16/2013** SeqNo: **340636** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	10								
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	0.17		0.2000		87.2	69.9	130			
Surr: 4-Bromofluorobenzene	0.19		0.2000		96.9	71.2	123			
Surr: Dibromofluoromethane	0.18		0.2000		92.4	73.9	134			
Surr: Toluene-d8	0.19		0.2000		92.9	81.9	122			

Sample ID: **lcs-8390** SampType: **LCS** TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS** Batch ID: **8390** RunNo: **11981**
Prep Date: **7/15/2013** Analysis Date: **7/17/2013** SeqNo: **340637** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.41	0.10	0.4000	0	103	51.1	171			
Chlorobenzene	0.41	0.10	0.4000	0	102	36.1	191			
1,1-Dichloroethene	0.38	0.10	0.4000	0	95.3	49.1	162			
Trichloroethene (TCE)	0.38	0.10	0.4000	0	95.6	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.18		0.2000		89.5	69.9	130			
Surr: 4-Bromofluorobenzene	0.20		0.2000		97.6	71.2	123			
Surr: Dibromofluoromethane	0.19		0.2000		93.4	73.9	134			
Surr: Toluene-d8	0.19		0.2000		92.9	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 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **mb-8399** SampType: **MBLK** TestCode: **EPA Method 8270C TCLP**
Client ID: **PBS** Batch ID: **8399** RunNo: **11982**
Prep Date: **7/16/2013** Analysis Date: **7/16/2013** SeqNo: **340675** 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: 2,4,6-Tribromophenol	0.11		0.2000		54.1	26.8	116			
Surr: 2-Fluorobiphenyl	0.069		0.1000		69.3	47.7	94			
Surr: 2-Fluorophenol	0.13		0.2000		65.3	17.9	87.1			
Surr: 4-Terphenyl-d14	0.072		0.1000		71.5	39.2	96.2			
Surr: Nitrobenzene-d5	0.060		0.1000		60.4	49.8	105			
Surr: Phenol-d5	0.096		0.2000		48.1	22.3	60.5			

Sample ID: **lcs-8399** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS** Batch ID: **8399** RunNo: **11982**
Prep Date: **7/16/2013** Analysis Date: **7/16/2013** SeqNo: **340676** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.065	0.010	0.1000	0	65.0	32	109			
3+4-Methylphenol	0.16	0.010	0.2000	0	78.9	36.2	121			
2,4-Dinitrotoluene	0.075	0.010	0.1000	0	75.0	40	108			
Hexachlorobenzene	0.071	0.010	0.1000	0	70.8	40.5	89			
Hexachlorobutadiene	0.065	0.010	0.1000	0	64.7	23	98.8			
Hexachloroethane	0.072	0.010	0.1000	0	71.7	20.9	104			
Nitrobenzene	0.090	0.010	0.1000	0	89.7	38.4	118			
Pentachlorophenol	0.046	0.010	0.1000	0	46.4	13	106			
Pyridine	0.016	0.010	0.1000	0	16.3	9.77	85.3			
2,4,5-Trichlorophenol	0.089	0.010	0.1000	0	89.5	19.6	118			
2,4,6-Trichlorophenol	0.083	0.010	0.1000	0	82.9	15.6	117			
Cresols, Total	0.24	0.010	0.3000	0	80.6	35.6	116			
Surr: 2,4,6-Tribromophenol	0.12		0.2000		61.6	26.8	116			
Surr: 2-Fluorobiphenyl	0.077		0.1000		77.0	47.7	94			
Surr: 2-Fluorophenol	0.11		0.2000		53.4	17.9	87.1			

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#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **lcs-8399** SampType: **LCS** TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS** Batch ID: **8399** RunNo: **11982**
Prep Date: **7/16/2013** Analysis Date: **7/16/2013** SeqNo: **340676** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	0.078		0.1000		78.5	39.2	96.2			
Surr: Nitrobenzene-d5	0.080		0.1000		80.5	49.8	105			
Surr: Phenol-d5	0.076		0.2000		37.9	22.3	60.5			

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#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **MB-8429** SampType: **MBLK** TestCode: **MERCURY, TCLP**
Client ID: **PBW** Batch ID: **8429** RunNo: **12011**
Prep Date: **7/17/2013** Analysis Date: **7/17/2013** SeqNo: **341348** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID: **LCS-8429** SampType: **LCS** TestCode: **MERCURY, TCLP**
Client ID: **LCSW** Batch ID: **8429** RunNo: **12011**
Prep Date: **7/17/2013** Analysis Date: **7/17/2013** SeqNo: **341349** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	96.0	80	120			

Sample ID: **1307524-001AMS** SampType: **MS** TestCode: **MERCURY, TCLP**
Client ID: **Soil Pile Behind 101** Batch ID: **8429** RunNo: **12011**
Prep Date: **7/17/2013** Analysis Date: **7/17/2013** SeqNo: **341356** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	95.3	75	125			

Sample ID: **1307524-001AMSD** SampType: **MSD** TestCode: **MERCURY, TCLP**
Client ID: **Soil Pile Behind 101** Batch ID: **8429** RunNo: **12011**
Prep Date: **7/17/2013** Analysis Date: **7/17/2013** SeqNo: **341357** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	94.4	75	125	0	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **MB-8438** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **8438** RunNo: **12051**
Prep Date: **7/18/2013** Analysis Date: **7/18/2013** SeqNo: **342596** Units: **mg/L**

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

Sample ID: **LCS-8438** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **8438** RunNo: **12051**
Prep Date: **7/18/2013** Analysis Date: **7/18/2013** SeqNo: **342597** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	0	103	80	120			
Cadmium	ND	1.0	0.5000	0	104	80	120			
Chromium	ND	5.0	0.5000	0	100	80	120			
Lead	ND	5.0	0.5000	0	98.7	80	120			
Silver	ND	5.0	0.1000	0	107	80	120			

Sample ID: **MB-8438** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **8438** RunNo: **12051**
Prep Date: **7/18/2013** Analysis Date: **7/18/2013** SeqNo: **342625** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								

Sample ID: **LCS-8438** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **8438** RunNo: **12051**
Prep Date: **7/18/2013** Analysis Date: **7/18/2013** SeqNo: **342626** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	113	80	120			

Sample ID: **MB-8438** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **8438** RunNo: **12065**
Prep Date: **7/18/2013** Analysis Date: **7/19/2013** SeqNo: **343176** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	1.0								

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1307524**
19-Jul-13

Client: Western Refining Southwest, Gallup
Project: Excavation Behind Tank

Sample ID: **LCS-8438** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **8438** RunNo: **12065**
Prep Date: **7/18/2013** Analysis Date: **7/19/2013** SeqNo: **343177** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	1.0	0.5000	0	111	80	120			

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

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: 1307524 RcptNo: 1

Received by/date: 07/12/13

Logged By: **Lindsay Mangin** 7/12/2013 7:00:00 AM

Completed By: **Lindsay Mangin** 7/12/2013 7:31:13 AM

Reviewed By: mg 07/12/13

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.1	Good	Yes			

Chain-of-Custody Record

Client: Western - Refining

Gallup Refinery

Mailing Address: RT 3 Box 7

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation

☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush _____

Project Name: Excavation Behind Tank

Project #: Excavation Behind Tank 101/102

Project Manager: Beck Larsen

Sampler: MPPE-OPPs

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1307524	BTEX + MTBE + TMB's (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	RCI	TCLP Metals			Air Bubbles (Y or N)
7/10/2013	15:30PM	H2O	Soil Pile Behind 101/102	9 oz - 4	N/A	-001			X							X	X	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
07-11-13	12:00	Alvin Dorsey		07/12/13	0700
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: 101 102 L

Pile/EUBC

E N S W

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.

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

July 11, 2014

Thurman B. Larsen
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Wash Pad Pit Evacuation Soil/Dirt OrderNo.: 1406C66

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 12 sample(s) on 6/26/2014 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1406C66**
Date Reported: **7/11/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #1
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-001
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	6/30/2014 4:37:57 PM	13967
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/1/2014 11:34:39 AM	13969
Barium	ND	100		mg/L	1	7/1/2014 11:34:39 AM	13969
Cadmium	ND	1.0		mg/L	1	7/1/2014 11:34:39 AM	13969
Chromium	ND	5.0		mg/L	1	7/1/2014 11:34:39 AM	13969
Lead	ND	5.0		mg/L	1	7/1/2014 11:34:39 AM	13969
Selenium	ND	1.0		mg/L	1	7/1/2014 11:34:39 AM	13969
Silver	ND	5.0		mg/L	1	7/1/2014 11:34:39 AM	13969
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 2:45:01 AM	13937
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%REC	10	7/1/2014 2:45:01 AM	13937
Surr: 4-Bromofluorobenzene	91.2	70-130		%REC	10	7/1/2014 2:45:01 AM	13937
Surr: Dibromofluoromethane	98.1	70-130		%REC	10	7/1/2014 2:45:01 AM	13937
Surr: Toluene-d8	88.5	70-130		%REC	10	7/1/2014 2:45:01 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #2
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-002
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	6/30/2014 4:43:18 PM	13967
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/1/2014 11:36:12 AM	13969
Barium	ND	100		mg/L	1	7/2/2014 11:41:56 AM	13969
Cadmium	ND	1.0		mg/L	1	7/1/2014 11:36:12 AM	13969
Chromium	ND	5.0		mg/L	1	7/1/2014 11:36:12 AM	13969
Lead	ND	5.0		mg/L	1	7/1/2014 11:36:12 AM	13969
Selenium	ND	1.0		mg/L	1	7/1/2014 11:36:12 AM	13969
Silver	ND	5.0		mg/L	1	7/1/2014 11:36:12 AM	13969
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 4:09:00 AM	13937
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%REC	10	7/1/2014 4:09:00 AM	13937
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	10	7/1/2014 4:09:00 AM	13937
Surr: Dibromofluoromethane	95.6	70-130		%REC	10	7/1/2014 4:09:00 AM	13937
Surr: Toluene-d8	90.3	70-130		%REC	10	7/1/2014 4:09:00 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #3
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-003
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	6/30/2014 4:45:06 PM	13967
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/1/2014 11:43:14 AM	13969
Barium	ND	100		mg/L	1	7/1/2014 11:43:14 AM	13969
Cadmium	ND	1.0		mg/L	1	7/1/2014 11:43:14 AM	13969
Chromium	ND	5.0		mg/L	1	7/1/2014 11:43:14 AM	13969
Lead	ND	5.0		mg/L	1	7/1/2014 11:43:14 AM	13969
Selenium	ND	1.0		mg/L	1	7/1/2014 11:43:14 AM	13969
Silver	ND	5.0		mg/L	1	7/1/2014 11:43:14 AM	13969
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 4:37:12 AM	13937
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%REC	10	7/1/2014 4:37:12 AM	13937
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	10	7/1/2014 4:37:12 AM	13937
Surr: Dibromofluoromethane	95.9	70-130		%REC	10	7/1/2014 4:37:12 AM	13937
Surr: Toluene-d8	91.3	70-130		%REC	10	7/1/2014 4:37:12 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #4
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-004 **Matrix:** SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	6/30/2014 4:46:54 PM	13967
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/1/2014 11:44:31 AM	13969
Barium	ND	100		mg/L	1	7/1/2014 11:44:31 AM	13969
Cadmium	ND	1.0		mg/L	1	7/1/2014 11:44:31 AM	13969
Chromium	ND	5.0		mg/L	1	7/1/2014 11:44:31 AM	13969
Lead	ND	5.0		mg/L	1	7/1/2014 11:44:31 AM	13969
Selenium	ND	1.0		mg/L	1	7/1/2014 11:44:31 AM	13969
Silver	ND	5.0		mg/L	1	7/1/2014 11:44:31 AM	13969
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 5:05:22 AM	13937
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%REC	10	7/1/2014 5:05:22 AM	13937
Surr: 4-Bromofluorobenzene	89.1	70-130		%REC	10	7/1/2014 5:05:22 AM	13937
Surr: Dibromofluoromethane	95.4	70-130		%REC	10	7/1/2014 5:05:22 AM	13937
Surr: Toluene-d8	91.6	70-130		%REC	10	7/1/2014 5:05:22 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #5
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-005
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	6/30/2014 4:52:26 PM	13967
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/1/2014 11:45:48 AM	13969
Barium	ND	100		mg/L	5	7/9/2014 7:54:53 AM	13969
Cadmium	ND	1.0		mg/L	1	7/1/2014 11:45:48 AM	13969
Chromium	ND	5.0		mg/L	1	7/1/2014 11:45:48 AM	13969
Lead	ND	5.0		mg/L	1	7/1/2014 11:45:48 AM	13969
Selenium	ND	1.0		mg/L	1	7/1/2014 11:45:48 AM	13969
Silver	ND	5.0		mg/L	1	7/1/2014 11:45:48 AM	13969
VOLATILES BY 8260B/1311						Analyst:	**RAA**
Benzene	ND	0.50		mg/L	1	7/2/2014 4:00:52 AM	13942
Surr: 1,2-Dichloroethane-d4	88.6	69.9-130		%REC	1	7/2/2014 4:00:52 AM	13942
Surr: 4-Bromofluorobenzene	96.2	71.2-123		%REC	1	7/2/2014 4:00:52 AM	13942
Surr: Dibromofluoromethane	87.2	73.9-134		%REC	1	7/2/2014 4:00:52 AM	13942
Surr: Toluene-d8	98.2	81.9-122		%REC	1	7/2/2014 4:00:52 AM	13942

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #6
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-006
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**MMD**
Mercury	ND	0.020		mg/L	1	6/30/2014 4:54:15 PM	13967
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/1/2014 11:47:13 AM	13969
Barium	ND	100		mg/L	1	7/1/2014 11:47:13 AM	13969
Cadmium	ND	1.0		mg/L	1	7/1/2014 11:47:13 AM	13969
Chromium	ND	5.0		mg/L	1	7/1/2014 11:47:13 AM	13969
Lead	ND	5.0		mg/L	1	7/1/2014 11:47:13 AM	13969
Selenium	ND	1.0		mg/L	1	7/1/2014 11:47:13 AM	13969
Silver	ND	5.0		mg/L	1	7/1/2014 11:47:13 AM	13969
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 5:33:27 AM	13937
Surr: 1,2-Dichloroethane-d4	88.4	70-130		%REC	10	7/1/2014 5:33:27 AM	13937
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	10	7/1/2014 5:33:27 AM	13937
Surr: Dibromofluoromethane	96.9	70-130		%REC	10	7/1/2014 5:33:27 AM	13937
Surr: Toluene-d8	90.2	70-130		%REC	10	7/1/2014 5:33:27 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #7
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-007
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/1/2014 3:16:56 PM	13989
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/2/2014 11:53:01 AM	14004
Barium	ND	100		mg/L	1	7/2/2014 11:53:01 AM	14004
Cadmium	ND	1.0		mg/L	1	7/2/2014 11:53:01 AM	14004
Chromium	ND	5.0		mg/L	1	7/2/2014 11:53:01 AM	14004
Lead	ND	5.0		mg/L	1	7/2/2014 11:53:01 AM	14004
Selenium	ND	1.0		mg/L	1	7/2/2014 11:53:01 AM	14004
Silver	ND	5.0		mg/L	1	7/2/2014 11:53:01 AM	14004
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 6:01:28 AM	13937
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%REC	10	7/1/2014 6:01:28 AM	13937
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	10	7/1/2014 6:01:28 AM	13937
Surr: Dibromofluoromethane	99.2	70-130		%REC	10	7/1/2014 6:01:28 AM	13937
Surr: Toluene-d8	88.7	70-130		%REC	10	7/1/2014 6:01:28 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #8
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-008
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/1/2014 3:18:42 PM	13989
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/2/2014 11:58:45 AM	14004
Barium	ND	100		mg/L	1	7/2/2014 11:58:45 AM	14004
Cadmium	ND	1.0		mg/L	1	7/2/2014 11:58:45 AM	14004
Chromium	ND	5.0		mg/L	1	7/2/2014 11:58:45 AM	14004
Lead	ND	5.0		mg/L	1	7/2/2014 11:58:45 AM	14004
Selenium	ND	1.0		mg/L	1	7/2/2014 11:58:45 AM	14004
Silver	ND	5.0		mg/L	1	7/2/2014 11:58:45 AM	14004
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 6:29:22 AM	13937
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	10	7/1/2014 6:29:22 AM	13937
Surr: 4-Bromofluorobenzene	89.5	70-130		%REC	10	7/1/2014 6:29:22 AM	13937
Surr: Dibromofluoromethane	96.9	70-130		%REC	10	7/1/2014 6:29:22 AM	13937
Surr: Toluene-d8	90.6	70-130		%REC	10	7/1/2014 6:29:22 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #9
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-009
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/1/2014 3:20:27 PM	13989
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/2/2014 12:00:28 PM	14004
Barium	ND	100		mg/L	1	7/2/2014 12:00:28 PM	14004
Cadmium	ND	1.0		mg/L	1	7/2/2014 12:00:28 PM	14004
Chromium	ND	5.0		mg/L	1	7/2/2014 12:00:28 PM	14004
Lead	ND	5.0		mg/L	1	7/2/2014 12:00:28 PM	14004
Selenium	ND	1.0		mg/L	1	7/2/2014 12:00:28 PM	14004
Silver	ND	5.0		mg/L	1	7/2/2014 12:00:28 PM	14004
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 6:57:14 AM	13937
Surr: 1,2-Dichloroethane-d4	90.0	70-130		%REC	10	7/1/2014 6:57:14 AM	13937
Surr: 4-Bromofluorobenzene	91.5	70-130		%REC	10	7/1/2014 6:57:14 AM	13937
Surr: Dibromofluoromethane	96.3	70-130		%REC	10	7/1/2014 6:57:14 AM	13937
Surr: Toluene-d8	89.7	70-130		%REC	10	7/1/2014 6:57:14 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #10
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-010 **Matrix:** SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/1/2014 3:22:14 PM	13989
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/2/2014 12:02:02 PM	14004
Barium	ND	100		mg/L	1	7/2/2014 12:02:02 PM	14004
Cadmium	ND	1.0		mg/L	1	7/2/2014 12:02:02 PM	14004
Chromium	ND	5.0		mg/L	1	7/2/2014 12:02:02 PM	14004
Lead	ND	5.0		mg/L	1	7/2/2014 12:02:02 PM	14004
Selenium	ND	1.0		mg/L	1	7/2/2014 12:02:02 PM	14004
Silver	ND	5.0		mg/L	1	7/2/2014 12:02:02 PM	14004
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 7:25:10 AM	13937
Surr: 1,2-Dichloroethane-d4	86.9	70-130		%REC	10	7/1/2014 7:25:10 AM	13937
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	10	7/1/2014 7:25:10 AM	13937
Surr: Dibromofluoromethane	95.5	70-130		%REC	10	7/1/2014 7:25:10 AM	13937
Surr: Toluene-d8	91.2	70-130		%REC	10	7/1/2014 7:25:10 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #11
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-011 **Matrix:** SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/1/2014 3:24:01 PM	13989
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/2/2014 12:03:40 PM	14004
Barium	ND	100		mg/L	1	7/2/2014 12:03:40 PM	14004
Cadmium	ND	1.0		mg/L	1	7/2/2014 12:03:40 PM	14004
Chromium	ND	5.0		mg/L	1	7/2/2014 12:03:40 PM	14004
Lead	ND	5.0		mg/L	1	7/2/2014 12:03:40 PM	14004
Selenium	ND	1.0		mg/L	1	7/2/2014 12:03:40 PM	14004
Silver	ND	5.0		mg/L	1	7/2/2014 12:03:40 PM	14004
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 7:53:09 AM	13937
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	10	7/1/2014 7:53:09 AM	13937
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	10	7/1/2014 7:53:09 AM	13937
Surr: Dibromofluoromethane	97.0	70-130		%REC	10	7/1/2014 7:53:09 AM	13937
Surr: Toluene-d8	91.5	70-130		%REC	10	7/1/2014 7:53:09 AM	13937

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Wash Pad Pit Evacuation #12
Project: Wash Pad Pit Evacuation Soil/Dirt
Collection Date: 6/26/2014 10:00:00 AM
Lab ID: 1406C66-012
Matrix: SOIL
Received Date: 6/26/2014 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
MERCURY, TCLP						Analyst:	**TES**
Mercury	ND	0.020		mg/L	1	7/1/2014 3:25:49 PM	13989
EPA METHOD 6010B: TCLP METALS						Analyst:	**ELS**
Arsenic	ND	5.0		mg/L	1	7/2/2014 12:05:32 PM	14004
Barium	ND	100		mg/L	1	7/2/2014 12:05:32 PM	14004
Cadmium	ND	1.0		mg/L	1	7/2/2014 12:05:32 PM	14004
Chromium	ND	5.0		mg/L	1	7/2/2014 12:05:32 PM	14004
Lead	ND	5.0		mg/L	1	7/2/2014 12:05:32 PM	14004
Selenium	ND	1.0		mg/L	1	7/2/2014 12:05:32 PM	14004
Silver	ND	5.0		mg/L	1	7/2/2014 12:05:32 PM	14004
EPA METHOD 8260B: TCLP COMPOUNDS						Analyst:	**RAA**
Benzene	ND	0.50		ppm	10	7/1/2014 8:21:13 AM	13937
Surr: 1,2-Dichloroethane-d4	88.4	70-130		%REC	10	7/1/2014 8:21:13 AM	13937
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	10	7/1/2014 8:21:13 AM	13937
Surr: Dibromofluoromethane	96.1	70-130		%REC	10	7/1/2014 8:21:13 AM	13937
Surr: Toluene-d8	89.5	70-130		%REC	10	7/1/2014 8:21:13 AM	13937

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		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **mb-13937** SampType: **MBLK** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **PBS** Batch ID: **13937** RunNo: **19608**
Prep Date: **6/27/2014** Analysis Date: **6/30/2014** SeqNo: **568555** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.6	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		81.4	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.45		0.5000		89.1	70	130			

Sample ID **lcs-13937** SampType: **LCS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **LCSS** Batch ID: **13937** RunNo: **19608**
Prep Date: **6/27/2014** Analysis Date: **6/30/2014** SeqNo: **568556** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	119	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.4	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		82.9	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		113	70	130			
Surr: Toluene-d8	0.43		0.5000		85.9	70	130			

Sample ID **1406c66-001ams** SampType: **MS** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13937** RunNo: **19608**
Prep Date: **6/27/2014** Analysis Date: **7/1/2014** SeqNo: **568558** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.50	0.9960	0	105	62.6	140			
Surr: 1,2-Dichloroethane-d4	4.4		4.980		88.7	70	130			
Surr: 4-Bromofluorobenzene	4.5		4.980		90.5	70	130			
Surr: Dibromofluoromethane	4.9		4.980		98.0	70	130			
Surr: Toluene-d8	4.5		4.980		90.4	70	130			

Sample ID **1406c66-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: TCLP Compounds**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13937** RunNo: **19608**
Prep Date: **6/27/2014** Analysis Date: **7/1/2014** SeqNo: **568559** Units: **ppm**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.50	0.9990	0	99.3	62.6	140	5.61	20	
Surr: 1,2-Dichloroethane-d4	4.4		4.995		87.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	4.6		4.995		91.6	70	130	0	0	
Surr: Dibromofluoromethane	4.8		4.995		95.9	70	130	0	0	
Surr: Toluene-d8	4.5		4.995		89.8	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.
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#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **mb-13942** SampType: **MBLK** TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS** Batch ID: **13942** RunNo: **19629**
Prep Date: **6/27/2014** Analysis Date: **7/2/2014** SeqNo: **569222** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		92.7	69.9	130			
Surr: 4-Bromofluorobenzene	0.19		0.2000		97.4	71.2	123			
Surr: Dibromofluoromethane	0.17		0.2000		86.7	73.9	134			
Surr: Toluene-d8	0.20		0.2000		98.6	81.9	122			

Sample ID **lcs-13942** SampType: **LCS** TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS** Batch ID: **13942** RunNo: **19629**
Prep Date: **6/27/2014** Analysis Date: **7/2/2014** SeqNo: **569223** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.41	0.10	0.4000	0	104	51.1	171			
Surr: 1,2-Dichloroethane-d4	0.17		0.2000		87.3	69.9	130			
Surr: 4-Bromofluorobenzene	0.19		0.2000		96.0	71.2	123			
Surr: Dibromofluoromethane	0.17		0.2000		84.1	73.9	134			
Surr: Toluene-d8	0.20		0.2000		102	81.9	122			

Sample ID **1406c66-005ams** SampType: **MS** TestCode: **Volatiles by 8260B/1311**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13942** RunNo: **19629**
Prep Date: **6/27/2014** Analysis Date: **7/2/2014** SeqNo: **569225** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.35	0.10	0.3994	0	87.5	51.1	171			
Surr: 1,2-Dichloroethane-d4	0.17		0.1997		87.4	69.9	130			
Surr: 4-Bromofluorobenzene	0.19		0.1997		95.4	71.2	123			
Surr: Dibromofluoromethane	0.17		0.1997		83.0	73.9	134			
Surr: Toluene-d8	0.22		0.1997		109	81.9	122			

Sample ID **1406c66-005amsd** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13942** RunNo: **19629**
Prep Date: **6/27/2014** Analysis Date: **7/2/2014** SeqNo: **569226** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.40	0.10	0.3994	0	100	51.1	171	13.4	20	
Surr: 1,2-Dichloroethane-d4	0.17		0.1997		87.6	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	0.19		0.1997		96.6	71.2	123	0	0	
Surr: Dibromofluoromethane	0.17		0.1997		87.0	73.9	134	0	0	
Surr: Toluene-d8	0.20		0.1997		101	81.9	122	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.
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#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **MB-13967** SampType: **MBLK** TestCode: **MERCURY, TCLP**
Client ID: **PBW** Batch ID: **13967** RunNo: **19584**
Prep Date: **6/30/2014** Analysis Date: **6/30/2014** SeqNo: **567692** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-13967** SampType: **LCS** TestCode: **MERCURY, TCLP**
Client ID: **LCSW** Batch ID: **13967** RunNo: **19584**
Prep Date: **6/30/2014** Analysis Date: **6/30/2014** SeqNo: **567693** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	98.1	80	120			

Sample ID **1406C66-001AMS** SampType: **MS** TestCode: **MERCURY, TCLP**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13967** RunNo: **19584**
Prep Date: **6/30/2014** Analysis Date: **6/30/2014** SeqNo: **567697** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0.002015	94.5	75	125			

Sample ID **1406C66-001AMSD** SampType: **MSD** TestCode: **MERCURY, TCLP**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13967** RunNo: **19584**
Prep Date: **6/30/2014** Analysis Date: **6/30/2014** SeqNo: **567698** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0.002015	92.5	75	125	0	20	

Sample ID **MB-13989** SampType: **MBLK** TestCode: **MERCURY, TCLP**
Client ID: **PBW** Batch ID: **13989** RunNo: **19610**
Prep Date: **7/1/2014** Analysis Date: **7/1/2014** SeqNo: **568598** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID **LCS-13989** SampType: **LCS** TestCode: **MERCURY, TCLP**
Client ID: **LCSW** Batch ID: **13989** RunNo: **19610**
Prep Date: **7/1/2014** Analysis Date: **7/1/2014** SeqNo: **568599** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	102	80	120			

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#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **1406C66-010AMS** SampType: **MS** TestCode: **MERCURY, TCLP**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13989** RunNo: **19610**
Prep Date: **7/1/2014** Analysis Date: **7/1/2014** SeqNo: **568607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	102	75	125			

Sample ID **1406C66-010AMSD** SampType: **MSD** TestCode: **MERCURY, TCLP**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13989** RunNo: **19610**
Prep Date: **7/1/2014** Analysis Date: **7/1/2014** SeqNo: **568610** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	100	75	125	0	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.
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#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **MB-13969** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **13969** RunNo: **19602**
Prep Date: **6/30/2014** Analysis Date: **7/1/2014** SeqNo: **568212** 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-13969** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **13969** RunNo: **19602**
Prep Date: **6/30/2014** Analysis Date: **7/1/2014** SeqNo: **568213** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	105	80	120			
Barium	ND	100	0.5000	0	93.4	80	120			
Cadmium	ND	1.0	0.5000	0	99.5	80	120			
Chromium	ND	5.0	0.5000	0	96.1	80	120			
Lead	ND	5.0	0.5000	0	92.6	80	120			
Selenium	ND	1.0	0.5000	0	99.1	80	120			
Silver	ND	5.0	0.1000	0	106	80	120			

Sample ID **1406C66-002AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13969** RunNo: **19602**
Prep Date: **6/30/2014** Analysis Date: **7/1/2014** SeqNo: **568224** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	103	75	125			
Cadmium	ND	1.0	0.5000	0	97.7	75	125			
Chromium	ND	5.0	0.5000	0	91.4	75	125			
Lead	ND	5.0	0.5000	0	88.0	75	125			
Selenium	ND	1.0	0.5000	0	94.3	75	125			
Silver	ND	5.0	0.1000	0	104	75	125			

Sample ID **1406C66-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13969** RunNo: **19602**
Prep Date: **6/30/2014** Analysis Date: **7/1/2014** SeqNo: **568225** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	102	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	94.2	75	125	0	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.
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#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **1406C66-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13969** RunNo: **19602**
Prep Date: **6/30/2014** Analysis Date: **7/1/2014** SeqNo: **568225** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	5.0	0.5000	0	88.4	75	125	0	20	
Lead	ND	5.0	0.5000	0	84.9	75	125	0	20	
Selenium	ND	1.0	0.5000	0	93.0	75	125	0	20	
Silver	ND	5.0	0.1000	0	100	75	125	0	20	

Sample ID **MB-14004** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **PBW** Batch ID: **14004** RunNo: **19639**
Prep Date: **7/1/2014** Analysis Date: **7/2/2014** SeqNo: **569714** 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-14004** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **LCSW** Batch ID: **14004** RunNo: **19639**
Prep Date: **7/1/2014** Analysis Date: **7/2/2014** SeqNo: **569715** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	102	80	120			
Barium	ND	100	0.5000	0	92.3	80	120			
Cadmium	ND	1.0	0.5000	0	97.6	80	120			
Chromium	ND	5.0	0.5000	0	93.3	80	120			
Lead	ND	5.0	0.5000	0	89.1	80	120			
Selenium	ND	1.0	0.5000	0	98.5	80	120			
Silver	ND	5.0	0.1000	0	104	80	120			

Sample ID **1406C66-002AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13969** RunNo: **19639**
Prep Date: **6/30/2014** Analysis Date: **7/2/2014** SeqNo: **569731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	2.297	78.7	75	125			

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#: **1406C66**
11-Jul-14

Client: Western Refining Southwest, Gallup
Project: Wash Pad Pit Evacuation Soil/Dirt

Sample ID **1406C66-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **Wash Pad Pit Evacu** Batch ID: **13969** RunNo: **19639**
Prep Date: **6/30/2014** Analysis Date: **7/2/2014** SeqNo: **569732** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	2.297	85.9	75	125	0	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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

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: **1406C66** RcptNo: 1

Received by/date: MG 06/26/2014

Logged By: **Ashley Gallegos** **6/26/2014 4:05:00 PM**

Completed By: **Ashley Gallegos** **6/26/2014 5:02:23 PM**

Reviewed By: 06/27/14

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° 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? Yes ✔ No
    (Note discrepancies on chain of custody)
    # of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ✔ No Adjusted?
14. Is it clear what analyses were requested? Yes ✔ No
15. Were all holding times able to be met? Yes ✔ No Checked by:
    (If no, notify customer for authorization.)

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			

Chain-of-Custody Record

Client: Western - Refining

Mailing Address: 92 GIANT CROSSING ROAD

Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 863 0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush_____

Project Name: Wash Pad Pit Evacuation Soil/Dirt

Project #:

Pile Located at North Runway

Project Manager: Beck Larsen

Sampler: ACT/k.Sanchez

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1406C66	BTEX (8021)B	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP Benzene On	8270 (Semi-VOA) TCLP	RCI	TCLP Metals			Air Bubbles (Y or N)
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #1	9 oz - 1	N/A	-001										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #2	9 oz - 1	N/A	-002										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #3	9 oz - 1	N/A	-003										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #4	9 oz - 1	N/A	-004										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #5	9 oz - 1	N/A	-005										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #6	9 oz - 1	N/A	-006										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #7	9 oz - 1	N/A	-007										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #8	9 oz - 1	N/A	-008										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #9	9 oz - 1	N/A	-009										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #10	9 oz - 1	N/A	-010										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #11	9 oz - 1	N/A	-011										X			X			
6/26/2014	10:00	Soil/Dirt	Wash Pad Pit Evacuation #12	9 oz - 1	N/A	-012										X			X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
06-26-14	13:00	[signature]			
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/26/14	1605	[signature]	[signature]	06/26/14	1605

Remarks:

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.

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

December 09, 2013

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Seep West Of Tank 102 OrderNo.: 1311343

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/7/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1311343**
Date Reported: **12/9/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-North-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 2:45:00 PM
Lab ID: 1311343-001
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 504.1 MODIFIED: EDB						Analyst:	**LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	11/13/2013 6:45:40 PM	10326
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	1500	100		mg/Kg	10	11/12/2013 10:56:00 AM	10261
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	11/12/2013 10:56:00 AM	10261
Surr: DNOP	0	66-131	S	%REC	10	11/12/2013 10:56:00 AM	10261
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1100	50		mg/Kg	10	11/11/2013 12:42:39 PM	R14718
Surr: BFB	389	74.5-129	S	%REC	10	11/11/2013 12:42:39 PM	R14718
EPA METHOD 7471: MERCURY						Analyst:	**JML**
Mercury	ND	0.034		mg/kg	1	11/13/2013 3:58:38 PM	10308
EPA METHOD 6010B: SOIL METALS						Analyst:	**ELS**
Antimony	ND	4.8		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Arsenic	ND	4.8		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Barium	380	0.19		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Beryllium	0.54	0.29		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Cadmium	ND	0.19		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Chromium	7.1	0.58		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Cobalt	3.1	0.58		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Iron	11000	96	B	mg/Kg	100	11/20/2013 6:17:55 PM	10362
Lead	2.7	0.48		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Manganese	440	0.19		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Nickel	5.2	0.96		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Selenium	ND	4.8		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Silver	ND	0.48		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Vanadium	17	4.8		mg/Kg	2	11/20/2013 8:56:11 AM	10362
Zinc	11	4.8		mg/Kg	2	11/20/2013 8:56:11 AM	10362
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	12	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Toluene	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Ethylbenzene	27	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,2-Dichloroethane (EDC)	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,2-Dibromoethane (EDB)	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Acetone	ND	30		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
2-Butanone	ND	20		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Carbon disulfide	ND	20		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Chlorobenzene	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Chloroform	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-North-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 2:45:00 PM
Lab ID: 1311343-001
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Chloromethane	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,1-Dichloroethane	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,1-Dichloroethene	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Methylene chloride	ND	4.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Styrene	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,1,2,2-Tetrachloroethane	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Tetrachloroethene (PCE)	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
trans-1,2-DCE	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,1,1-Trichloroethane	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Trichloroethene (TCE)	ND	2.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Xylenes, Total	120	4.0		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
1,4-Dioxane	ND	40		mg/Kg	40	11/13/2013 1:34:47 PM	R14779
Surr: Dibromofluoromethane	104	70-130		%REC	40	11/13/2013 1:34:47 PM	R14779
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	40	11/13/2013 1:34:47 PM	R14779
Surr: Toluene-d8	99.6	70-130		%REC	40	11/13/2013 1:34:47 PM	R14779
Surr: 4-Bromofluorobenzene	82.2	70-130		%REC	40	11/13/2013 1:34:47 PM	R14779

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-East-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 2:55:00 PM
Lab ID: 1311343-002
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 504.1 MODIFIED: EDB						Analyst:	**LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	11/13/2013 6:59:29 PM	10326
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	68	10		mg/Kg	1	11/12/2013 10:25:13 AM	10261
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/12/2013 10:25:13 AM	10261
Surr: DNOP	108	66-131		%REC	1	11/12/2013 10:25:13 AM	10261
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	330	25		mg/Kg	5	11/11/2013 3:11:08 PM	R14718
Surr: BFB	222	74.5-129	S	%REC	5	11/11/2013 3:11:08 PM	R14718
EPA METHOD 7471: MERCURY						Analyst:	**JML**
Mercury	ND	0.034		mg/kg	1	11/13/2013 4:00:24 PM	10308
EPA METHOD 6010B: SOIL METALS						Analyst:	**ELS**
Antimony	ND	12		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Arsenic	ND	12		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Barium	220	0.49		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Beryllium	1.3	0.74		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Cadmium	ND	0.49		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Chromium	16	1.5		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Cobalt	6.6	1.5		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Iron	18000	98	B	mg/Kg	100	11/20/2013 6:20:22 PM	10362
Lead	3.6	1.2		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Manganese	630	0.49		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Nickel	11	2.5		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Selenium	ND	12		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Silver	ND	1.2		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Vanadium	24	12		mg/Kg	5	11/20/2013 10:01:33 AM	10362
Zinc	25	12		mg/Kg	5	11/20/2013 10:01:33 AM	10362
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	3.5	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Toluene	15	2.5		mg/Kg	50	11/13/2013 2:03:23 PM	R14779
Ethylbenzene	6.9	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,2-Dichloroethane (EDC)	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,2-Dibromoethane (EDB)	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Acetone	ND	3.8		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
2-Butanone	ND	2.5		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Carbon disulfide	ND	2.5		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Chlorobenzene	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Chloroform	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-East-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 2:55:00 PM
Lab ID: 1311343-002
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Chloromethane	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,1-Dichloroethane	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,1-Dichloroethene	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Methylene chloride	ND	0.50		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Styrene	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,1,2,2-Tetrachloroethane	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Tetrachloroethene (PCE)	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
trans-1,2-DCE	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,1,1-Trichloroethane	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Trichloroethene (TCE)	ND	0.25		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Xylenes, Total	36	0.50		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
1,4-Dioxane	ND	5.0		mg/Kg	5	11/12/2013 7:15:09 PM	R14754
Surr: Dibromofluoromethane	96.0	70-130		%REC	5	11/12/2013 7:15:09 PM	R14754
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	5	11/12/2013 7:15:09 PM	R14754
Surr: Toluene-d8	96.4	70-130		%REC	5	11/12/2013 7:15:09 PM	R14754
Surr: 4-Bromofluorobenzene	72.0	70-130		%REC	5	11/12/2013 7:15:09 PM	R14754

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-South-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 3:10:00 PM
Lab ID: 1311343-003 **Matrix:** SOIL **Received Date:** 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 504.1 MODIFIED: EDB						Analyst:	**LRW**
1,2-Dibromoethane	ND	0.099		µg/Kg	1	11/13/2013 7:13:11 PM	10326
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	1300	99		mg/Kg	10	11/12/2013 11:26:55 AM	10261
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	11/12/2013 11:26:55 AM	10261
Surr: DNOP	0	66-131	S	%REC	10	11/12/2013 11:26:55 AM	10261
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	2600	500		mg/Kg	100	11/11/2013 3:41:27 PM	R14718
Surr: BFB	119	74.5-129		%REC	100	11/11/2013 3:41:27 PM	R14718
EPA METHOD 7471: MERCURY						Analyst:	**JML**
Mercury	ND	0.032		mg/kg	1	11/13/2013 4:02:10 PM	10308
EPA METHOD 6010B: SOIL METALS						Analyst:	**ELS**
Antimony	ND	4.9		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Arsenic	ND	4.9		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Barium	730	0.49		mg/Kg	5	11/20/2013 10:13:35 AM	10362
Beryllium	0.57	0.29		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Cadmium	ND	0.19		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Chromium	6.6	0.58		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Cobalt	3.2	0.58		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Iron	10000	49	B	mg/Kg	50	11/20/2013 6:22:49 PM	10362
Lead	3.4	0.49		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Manganese	620	0.49		mg/Kg	5	11/20/2013 10:13:35 AM	10362
Nickel	5.4	0.97		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Selenium	ND	4.9		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Silver	ND	0.49		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Vanadium	18	4.9		mg/Kg	2	11/20/2013 9:29:07 AM	10362
Zinc	14	4.9		mg/Kg	2	11/20/2013 9:29:07 AM	10362
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	48	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Toluene	230	10		mg/Kg	200	11/13/2013 2:32:09 PM	R14779
Ethylbenzene	50	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
1,2-Dichloroethane (EDC)	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
1,2-Dibromoethane (EDB)	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Acetone	ND	30		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
2-Butanone	ND	20		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Carbon disulfide	ND	20		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Chlorobenzene	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Chloroform	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-South-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 3:10:00 PM
Lab ID: 1311343-003
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Chloromethane	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
1,1-Dichloroethane	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
1,1-Dichloroethene	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Methylene chloride	ND	4.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Styrene	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
1,1,2,2-Tetrachloroethane	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Tetrachloroethene (PCE)	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
trans-1,2-DCE	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
1,1,1-Trichloroethane	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Trichloroethene (TCE)	ND	2.0		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Xylenes, Total	260	20		mg/Kg	200	11/13/2013 2:32:09 PM	R14779
1,4-Dioxane	ND	40		mg/Kg	40	11/12/2013 7:43:48 PM	R14754
Surr: Dibromofluoromethane	99.6	70-130		%REC	40	11/12/2013 7:43:48 PM	R14754
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	40	11/12/2013 7:43:48 PM	R14754
Surr: Toluene-d8	95.5	70-130		%REC	40	11/12/2013 7:43:48 PM	R14754
Surr: 4-Bromofluorobenzene	77.6	70-130		%REC	40	11/12/2013 7:43:48 PM	R14754

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-West-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 3:20:00 PM
Lab ID: 1311343-004
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 504.1 MODIFIED: EDB						Analyst:	**LRW**
1,2-Dibromoethane	ND	0.10		µg/Kg	1	11/13/2013 7:27:02 PM	10326
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst:	**BCN**
Diesel Range Organics (DRO)	290	9.9		mg/Kg	1	11/12/2013 11:57:50 AM	10261
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/12/2013 11:57:50 AM	10261
Surr: DNOP	112	66-131		%REC	1	11/12/2013 11:57:50 AM	10261
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	340	50		mg/Kg	10	11/11/2013 4:41:52 PM	R14718
Surr: BFB	136	74.5-129	S	%REC	10	11/11/2013 4:41:52 PM	R14718
EPA METHOD 7471: MERCURY						Analyst:	**JML**
Mercury	ND	0.033		mg/kg	1	11/13/2013 4:03:56 PM	10308
EPA METHOD 6010B: SOIL METALS						Analyst:	**ELS**
Antimony	ND	12		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Arsenic	ND	12		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Barium	250	0.49		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Beryllium	1.2	0.73		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Cadmium	ND	0.49		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Chromium	15	1.5		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Cobalt	6.3	1.5		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Iron	17000	98	B	mg/Kg	100	11/20/2013 6:25:18 PM	10362
Lead	4.0	1.2		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Manganese	610	0.49		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Nickel	11	2.4		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Selenium	ND	12		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Silver	ND	1.2		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Vanadium	24	12		mg/Kg	5	11/20/2013 10:15:56 AM	10362
Zinc	25	12		mg/Kg	5	11/20/2013 10:15:56 AM	10362
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	7.8	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Toluene	15	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Ethylbenzene	6.3	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Acetone	ND	7.5		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
2-Butanone	ND	5.0		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Carbon disulfide	ND	5.0		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Chlorobenzene	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Chloroform	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Pit-West-9'
Project: Seep West Of Tank 102
Collection Date: 11/5/2013 3:20:00 PM
Lab ID: 1311343-004
Matrix: SOIL
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Chloromethane	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,1-Dichloroethane	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Methylene chloride	ND	1.0		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Styrene	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Xylenes, Total	32	1.0		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
1,4-Dioxane	ND	10		mg/Kg	10	11/12/2013 8:12:20 PM	R14754
Surr: Dibromofluoromethane	96.3	70-130		%REC	10	11/12/2013 8:12:20 PM	R14754
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	10	11/12/2013 8:12:20 PM	R14754
Surr: Toluene-d8	96.9	70-130		%REC	10	11/12/2013 8:12:20 PM	R14754
Surr: 4-Bromofluorobenzene	84.1	70-130		%REC	10	11/12/2013 8:12:20 PM	R14754

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.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: MEOH BLANK
Project: Seep West Of Tank 102
Collection Date: 11/5/2013
Lab ID: 1311343-005
Matrix: MEOH (SOIL)
Received Date: 11/7/2013 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Toluene	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Ethylbenzene	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Acetone	ND	0.75		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
2-Butanone	ND	0.50		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Carbon disulfide	ND	0.50		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Chlorobenzene	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Chloroform	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Chloromethane	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,1-Dichloroethane	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,1-Dichloroethene	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Methylene chloride	ND	0.10		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Styrene	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
trans-1,2-DCE	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Xylenes, Total	ND	0.10		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
1,4-Dioxane	ND	1.0		mg/Kg	1	11/12/2013 8:40:56 PM	R14754
Surr: Dibromofluoromethane	104	70-130		%REC	1	11/12/2013 8:40:56 PM	R14754
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%REC	1	11/12/2013 8:40:56 PM	R14754
Surr: Toluene-d8	88.8	70-130		%REC	1	11/12/2013 8:40:56 PM	R14754
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1	11/12/2013 8:40:56 PM	R14754

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		

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

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number 131113061-001 **Sampling Date** 11/5/2013 **Date/Time Received** 11/12/2013 10:14 AM
Client Sample ID 1311343-001B / PIT-NORTH-9 **Sampling Time** 2:45 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.312	11/18/2013	CRW	EPA 335.4	
%moisture	17.9	Percent		11/18/2013	EMP	%moisture	

Sample Number 131113061-002 **Sampling Date** 11/5/2013 **Date/Time Received** 11/12/2013 10:14 AM
Client Sample ID 1311343-002B / PIT-EAST-9 **Sampling Time** 2:55 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.313	11/18/2013	CRW	EPA 335.4	
%moisture	20.6	Percent		11/18/2013	EMP	%moisture	

Sample Number 131113061-003 **Sampling Date** 11/5/2013 **Date/Time Received** 11/12/2013 10:14 AM
Client Sample ID 1311343-003B / PIT-SOUTH-9 **Sampling Time** 3:10 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.292	11/18/2013	CRW	EPA 335.4	
%moisture	15.1	Percent		11/18/2013	EMP	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	131113061
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1311343
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	131113061-004	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-004B / PIT-WEST-9	**Sampling Time**	3:20 PM		
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.298	11/18/2013	CRW	EPA 335.4	
%moisture	20	Percent		11/18/2013	EMP	%moisture	

Authorized Signature

John Coddington, Lab Manager

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

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-001	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-001B / PIT-NORTH-9	**Sampling Time**	2:45 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,3-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,4-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1-Methylnaphthalene	7.44	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4,6-Trichlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dimethylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrotoluene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Chlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylnaphthalene	11.8	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
3+4-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
4-Nitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Acenaphthene	0.488	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Anthracene	0.236	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]anthracene	0.131	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[b]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[k]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzyl alcohol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
bis(2-Ethylhexyl)phthalate	0.185	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Butylbenzylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Chrysene	0.290	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dibenz[a,h]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Diethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dimethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-butylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-octylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluorene	0.940	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Naphthalene	8.80	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Nitrobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenanthrene	2.06	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	131113061
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1311343
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	131113061-001	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-001B / PIT-NORTH-9	**Sampling Time**	2:45 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Phenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Pyrene	0.518	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Pyridine	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
5-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
6-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
7,12-Dimethylbenz(a)anthracene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzenethiole	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzo(j)fluoranthene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Dibenz(a,j)acridine	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Quinoline	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
%moisture	17.9	Percent		11/18/2013	EMP	%moisture	

Surrogate Data

Sample Number 131113061-001

Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270D	109.3	32-126
2-Fluorobiphenyl	EPA 8270D	100.0	31-115
2-Fluorophenol	EPA 8270D	85.3	35-121
Nitrobenzene-d5	EPA 8270D	66.6	22-112
Phenol-d5	EPA 8270D	93.1	23-128
Terphenyl-d14	EPA 8270D	103.3	21-135

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-002	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-002B / PIT-EAST-9	**Sampling Time**	2:55 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,3-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,4-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1-Methylnaphthalene	0.728	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4,6-Trichlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dimethylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrotoluene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Chlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylnaphthalene	1.17	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
3+4-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
4-Nitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Acenaphthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[b]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[k]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzyl alcohol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Butylbenzylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Chrysene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dibenz[a,h]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Diethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dimethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-butylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-octylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluorene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Naphthalene	1.10	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Nitrobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenanthrene	0.136	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

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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 #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-002	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-002B / PIT-EAST-9	**Sampling Time**	2:55 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Pyridine	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
5-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
6-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
7,12-Dimethylbenz(a)anthracene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzenethiole	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzo(j)fluoranthene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Dibenz(a,j)acridine	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Quinoline	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
%moisture	20.6	Percent		11/18/2013	EMP	%moisture	

Surrogate Data

Sample Number 131113061-002

Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270D	98.6	32-126
2-Fluorobiphenyl	EPA 8270D	79.2	31-115
2-Fluorophenol	EPA 8270D	76.2	35-121
Nitrobenzene-d5	EPA 8270D	82.3	22-112
Phenol-d5	EPA 8270D	88.7	23-128
Terphenyl-d14	EPA 8270D	99.9	21-135

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-003	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-003B / PIT-SOUTH-9	**Sampling Time**	3:10 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,3-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,4-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1-Methylnaphthalene	8.12	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4,6-Trichlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dimethylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrotoluene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Chlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylnaphthalene	14.0	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
3+4-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
4-Nitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Acenaphthene	0.375	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Anthracene	0.147	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[b]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[k]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzyl alcohol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Butylbenzylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Chrysene	0.186	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dibenz[a,h]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Diethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dimethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-butylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-octylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluorene	0.615	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Naphthalene	13.9	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Nitrobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenanthrene	1.26	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-003	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-003B / PIT-SOUTH-9	**Sampling Time**	3:10 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Pyrene	0.334	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Pyridine	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
5-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
6-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
7,12-Dimethylbenz(a)anthracene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzenethiole	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzo(j)fluoranthene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Dibenz(a,j)acridine	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Quinoline	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
%moisture	15.1	Percent		11/18/2013	EMP	%moisture	

Surrogate Data

Sample Number 131113061-003

Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270D	113.0	32-126
2-Fluorobiphenyl	EPA 8270D	93.0	31-115
2-Fluorophenol	EPA 8270D	90.0	35-121
Nitrobenzene-d5	EPA 8270D	67.4	22-112
Phenol-d5	EPA 8270D	98.7	23-128
Terphenyl-d14	EPA 8270D	100.3	21-135

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-004	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-004B / PIT-WEST-9	**Sampling Time**	3:20 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,3-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1,4-Dichlorobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
1-Methylnaphthalene	1.32	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4,6-Trichlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dimethylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2,4-Dinitrotoluene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Chlorophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylnaphthalene	2.12	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
2-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
3+4-Methylphenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
4-Nitrophenol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Acenaphthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[a]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[b]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzo[k]fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Benzyl alcohol	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Butylbenzylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Chrysene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dibenz[a,h]anthracene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Diethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Dimethylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-butylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Di-n-octylphthalate	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluoranthene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Fluorene	0.127	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Indeno[1,2,3-cd]pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Naphthalene	1.69	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Nitrobenzene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenanthrene	0.235	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Phenol	0.494	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 131113061
Project Name: 1311343

Analytical Results Report

Sample Number	131113061-004	**Sampling Date**	11/5/2013	**Date/Time Received**	11/12/2013 10:14 AM
Client Sample ID	1311343-004B / PIT-WEST-9	**Sampling Time**	3:20 PM	**Extraction Date**	11/14/2013
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Pyrene	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
Pyridine	ND	mg/kg	0.1	11/21/2013	EMP	EPA 8270D	
5-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
6-Methylchrysene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
7,12-Dimethylbenz(a)anthracene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzenethiole	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Benzo(j)fluoranthene	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Dibenz(a,j)acridine	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
Quinoline	ND	mg/kg	0.1	11/27/2013	EMP	EPA 8270D	
%moisture	20	Percent		11/18/2013	EMP	%moisture	

Surrogate Data

Sample Number 131113061-004

Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270D	98.6	32-126
2-Fluorobiphenyl	EPA 8270D	82.6	31-115
2-Fluorophenol	EPA 8270D	78.6	35-121
Nitrobenzene-d5	EPA 8270D	89.2	22-112
Phenol-d5	EPA 8270D	90.7	23-128
Terphenyl-d14	EPA 8270D	100.1	21-135

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.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **MB-10326** SampType: **MBLK** TestCode: **EPA Method 504.1 Modified: EDB**
Client ID: **PBS** Batch ID: **10326** RunNo: **14780**
Prep Date: **11/13/2013** Analysis Date: **11/13/2013** SeqNo: **425761** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.10								

Sample ID **LCS-10326** SampType: **LCS** TestCode: **EPA Method 504.1 Modified: EDB**
Client ID: **LCSS** Batch ID: **10326** RunNo: **14780**
Prep Date: **11/13/2013** Analysis Date: **11/13/2013** SeqNo: **425762** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.1	0.10	1.000	0	109	70	130			

Sample ID **1311326-008AMS** SampType: **MS** TestCode: **EPA Method 504.1 Modified: EDB**
Client ID: **BatchQC** Batch ID: **10326** RunNo: **14780**
Prep Date: **11/13/2013** Analysis Date: **11/13/2013** SeqNo: **425785** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.2	0.10	1.000	0	117	62.4	144			

Sample ID **1311326-008AMSD** SampType: **MSD** TestCode: **EPA Method 504.1 Modified: EDB**
Client ID: **BatchQC** Batch ID: **10326** RunNo: **14780**
Prep Date: **11/13/2013** Analysis Date: **11/13/2013** SeqNo: **425789** Units: **µg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	1.2	0.10	0.9972	0	124	62.4	144	5.38	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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **MB-10261** SampType: **MBLK** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **10261** RunNo: **14724**
Prep Date: **11/11/2013** Analysis Date: **11/12/2013** SeqNo: **424195** 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	9.1		10.00		91.0	66	131			

Sample ID **LCS-10261** SampType: **LCS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **10261** RunNo: **14724**
Prep Date: **11/11/2013** Analysis Date: **11/12/2013** SeqNo: **424196** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.6	62.1	127			
Surr: DNOP	4.5		5.000		90.6	66	131			

Sample ID **1311322-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **10261** RunNo: **14724**
Prep Date: **11/11/2013** Analysis Date: **11/12/2013** SeqNo: **424643** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	440	10	50.30	382.9	105	47.4	148			
Surr: DNOP	4.6		5.030		91.4	66	131			

Sample ID **1311322-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **10261** RunNo: **14724**
Prep Date: **11/11/2013** Analysis Date: **11/12/2013** SeqNo: **424644** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	430	10	49.90	382.9	89.3	47.4	148	1.90	22.7	
Surr: DNOP	4.7		4.990		94.5	66	131	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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **R14718** RunNo: **14718**
Prep Date: Analysis Date: **11/11/2013** SeqNo: **423705** 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	940		1000		93.6	74.5	129			

Sample ID **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **R14718** RunNo: **14718**
Prep Date: Analysis Date: **11/11/2013** SeqNo: **423706** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.6	74.5	126			
Surr: BFB	1000		1000		103	74.5	129			

Sample ID **1311385-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R14718** RunNo: **14718**
Prep Date: Analysis Date: **11/11/2013** SeqNo: **423709** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.6	76	156			
Surr: BFB	1000		1000		104	74.5	129			

Sample ID **1311385-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BatchQC** Batch ID: **R14718** RunNo: **14718**
Prep Date: Analysis Date: **11/11/2013** SeqNo: **423710** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.4	76	156	3.73	17.7	
Surr: BFB	1000		1000		105	74.5	129	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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **mb-10281** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS** Batch ID: **R14754** RunNo: **14754**
Prep Date: Analysis Date: **11/12/2013** SeqNo: **425094** 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								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Acetone	ND	0.75								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Chlorobenzene	ND	0.050								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
Methylene chloride	ND	0.15								
Styrene	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		105	70	130			
Surr: Toluene-d8	0.46		0.5000		91.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			

Sample ID **lcs-10281** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS** Batch ID: **R14754** RunNo: **14754**
Prep Date: Analysis Date: **11/12/2013** SeqNo: **425096** 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	112	70	130			
Toluene	0.93	0.050	1.000	0	93.2	69.9	139			
Chlorobenzene	1.0	0.050	1.000	0	99.6	70	130			
1,1-Dichloroethene	1.2	0.050	1.000	0	120	69.3	131			
Trichloroethene (TCE)	0.95	0.050	1.000	0	95.2	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.2	70	130			
Surr: Toluene-d8	0.45		0.5000		89.0	70	130			

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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **lcs-10281** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS** Batch ID: **R14754** RunNo: **14754**
Prep Date: Analysis Date: **11/12/2013** SeqNo: **425096** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.2	70	130			

Sample ID **5mL rb** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS** Batch ID: **R14779** RunNo: **14779**
Prep Date: Analysis Date: **11/13/2013** SeqNo: **425751** 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								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Acetone	ND	0.75								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Chlorobenzene	ND	0.050								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
Methylene chloride	ND	0.15								
Styrene	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130			
Surr: Toluene-d8	0.48		0.5000		96.9	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		106	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS** Batch ID: **R14779** RunNo: **14779**
Prep Date: Analysis Date: **11/13/2013** SeqNo: **425752** 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	107	70	130			
Toluene	1.0	0.050	1.000	0	103	69.9	139			

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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS** Batch ID: **R14779** RunNo: **14779**
Prep Date: Analysis Date: **11/13/2013** SeqNo: **425752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	1.0	0.050	1.000	0	99.7	70	130			
1,1-Dichloroethene	1.2	0.050	1.000	0	121	69.3	131			
Trichloroethene (TCE)	0.94	0.050	1.000	0	93.6	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.55		0.5000		110	70	130			

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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **MB-10308** SampType: **MBLK** TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS** Batch ID: **10308** RunNo: **14775**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425443** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID **LCS-10308** SampType: **LCS** TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS** Batch ID: **10308** RunNo: **14775**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425444** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID **1311343-004AMS** SampType: **MS** TestCode: **EPA Method 7471: Mercury**
Client ID: **Pit-West-9'** Batch ID: **10308** RunNo: **14775**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425449** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1685	0.007587	98.4	75	125			

Sample ID **1311343-004AMSD** SampType: **MSD** TestCode: **EPA Method 7471: Mercury**
Client ID: **Pit-West-9'** Batch ID: **10308** RunNo: **14775**
Prep Date: **11/12/2013** Analysis Date: **11/13/2013** SeqNo: **425450** Units: **mg/kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1672	0.007587	98.5	75	125	0.649	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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **MB-10362** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **10362** RunNo: **14863**
Prep Date: **11/15/2013** Analysis Date: **11/18/2013** SeqNo: **428475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID **LCS-10362** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **10362** RunNo: **14863**
Prep Date: **11/15/2013** Analysis Date: **11/18/2013** SeqNo: **428476** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.9	80	120			
Arsenic	24	2.5	25.00	0	96.7	80	120			
Barium	23	0.10	25.00	0	92.6	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	24	0.10	25.00	0	96.8	80	120			
Chromium	24	0.30	25.00	0	95.3	80	120			
Lead	24	0.25	25.00	0	95.6	80	120			
Manganese	23	0.10	25.00	0	93.9	80	120			
Nickel	23	0.50	25.00	0	91.2	80	120			
Selenium	23	2.5	25.00	0	93.8	80	120			
Silver	4.9	0.25	5.000	0	98.5	80	120			
Vanadium	25	2.5	25.00	0	100	80	120			
Zinc	23	2.5	25.00	0	93.2	80	120			

Sample ID **MB-10362** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **10362** RunNo: **14921**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430368** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								

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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **LCS-10362** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **10362** RunNo: **14921**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430369** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	25	0.30	25.00	0	99.9	80	120			

Sample ID **1311343-002AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Pit-East-9'** Batch ID: **10362** RunNo: **14921**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430404** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	16	12	24.42	0	65.1	75	125			S
Arsenic	25	12	24.42	0	104	75	125			
Barium	240	0.49	24.42	217.8	95.0	75	125			
Beryllium	26	0.73	24.42	1.253	102	75	125			
Cadmium	25	0.49	24.42	0	101	75	125			
Chromium	43	1.5	24.42	15.71	113	75	125			
Cobalt	30	1.5	24.42	6.599	97.4	75	125			
Lead	27	1.2	24.42	3.634	93.8	75	125			
Manganese	470	0.49	24.42	629.9	-667	75	125			S
Nickel	35	2.4	24.42	11.44	98.3	75	125			
Selenium	21	12	24.42	0	87.2	75	125			
Silver	4.8	1.2	4.884	0	98.0	75	125			
Vanadium	56	12	24.42	24.04	129	75	125			S
Zinc	53	12	24.42	24.91	115	75	125			

Sample ID **1311343-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Pit-East-9'** Batch ID: **10362** RunNo: **14921**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430405** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	14	12	24.08	0	57.2	75	125	14.3	20	S
Arsenic	23	12	24.08	0	97.4	75	125	8.20	20	
Barium	210	0.48	24.08	217.8	-18.6	75	125	12.2	20	S
Beryllium	23	0.72	24.08	1.253	92.0	75	125	11.4	20	
Cadmium	23	0.48	24.08	0	95.7	75	125	6.67	20	
Chromium	38	1.4	24.08	15.71	93.6	75	125	12.4	20	
Cobalt	27	1.4	24.08	6.599	85.2	75	125	11.3	20	
Lead	25	1.2	24.08	3.634	87.7	75	125	6.99	20	
Manganese	430	0.48	24.08	629.9	-818	75	125	7.54	20	S
Nickel	32	2.4	24.08	11.44	83.7	75	125	11.5	20	
Selenium	18	12	24.08	0	75.6	75	125	15.6	20	
Silver	4.5	1.2	4.816	0	93.2	75	125	6.49	20	
Vanadium	49	12	24.08	24.04	103	75	125	12.9	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#: **1311343**
09-Dec-13

Client: Western Refining Southwest, Gallup
Project: Seep West Of Tank 102

Sample ID **1311343-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **Pit-East-9'** Batch ID: **10362** RunNo: **14921**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430405** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	49	12	24.08	24.91	101	75	125	7.25	20	

Sample ID **MB-10362** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS** Batch ID: **10362** RunNo: **14944**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430964** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.8	1.0								

Sample ID **LCS-10362** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS** Batch ID: **10362** RunNo: **14944**
Prep Date: **11/15/2013** Analysis Date: **11/20/2013** SeqNo: **430965** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	108	80	120			B

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

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: 1311343 RcptNo: 1

Received by/date: RM 11/07/2013

Logged By: **Ashley Gallegos** 11/7/2013 8:00:00 AM AG

Completed By: **Ashley Gallegos** 11/8/2013 2:54:28 PM AG

Reviewed By: AA 11/08/13

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? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
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? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# 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	1.1	Good	Yes			

Chain-of-Custody Record

Client: WESTERN REFINING SW
GALLUP REFINERY
Mailing Address: ROUTE 3 BOX 7
JAMESTOWN, NM 87301
Phone #: 505.722.3833
email or Fax#: CHERYL.JOHNSON@WNR.COM
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: SEEP WEST OF TANK 102
Project #:
Project Manager: CHERYL JOHNSON
Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.1

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311343	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	METALS (SEE ATTACHMENT)			Air Bubbles (Y or N)
11/5/13	1445	SOIL	PIT-NORTH-9'	2 4oz J 2 VIALS	MEOH	-001			✓							✓	✓	✓			
	1455		PIT-EAST-9'			-002			✓							✓	✓	✓			
	1510		PIT-SOUTH-9'			-003			✓							✓	✓	✓			
	1520		PIT-WEST-9'			-004			✓							✓	✓	✓			
	—	MEOH	MEOH BLANK	2 VIALS	MEOH	-005										✓					

Date:	Time:	Relinquished by:	Received by:	Date Time
11.6.13	0700	[signature]	[signature]	11/07/13 0700
Date:	Time:	Relinquished by:	Received by:	Date Time

Remarks:

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.

Johnson, Cheryl

From: Tracy Payne [tracy.payne@rpsgroup.com]
Sent: Tuesday, November 05, 2013 8:54 PM
To: Johnson, Cheryl
Subject: Please print this email for me - Thanks Tracy

From: Scott T. Crouch
Sent: Friday, November 01, 2013 8:32 AM
To: Andy Freeman
Cc: Tracy Payne; Riege, Ed; Hains, Allen; Johnson, Cheryl
Subject: additional soil sample jars

Andy:

When Tracy drops off the soil samples on Saturday, can we get some additional jars/containers for soil samples that will support the following analyses? I am not certain yet that we will run this exact same list, but we need to be prepared to match it. Please include enough jars to accommodate 12 soil samples.

Analyte list from Aeration Basin Investigation Work Plan.

samples will be analyzed by the following methods:

- SW-846 Method 8260 for Skinner List volatile organic compounds;
- SW-846 Method 8270 for Skinner List semi-volatile organic compounds; and
- SW-846 Method 8015B gasoline range (C5-C10), diesel range (>C10-C28), and motor oil range (>C28-C36) organics.

Groundwater and soil samples will also be analyzed for the following Skinner List metals and iron and manganese using the indicated analytical methods shown in Table 4-1.

Table 4-1
Inorganic Analytical Methods

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020

Analyte	Analytical Method
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020

Scott T. Crouch P.G.
Senior Consultant - RPS
Cielo Center, 1250 South Capital of Texas Highway, Building Three, Suite 200,
Austin, Texas, 78746 .
USA
Tel: +1 512 347 7588
Fax: +1 512 347 8243
Direct: +1 512 879 6697
Mobile: +1 512 297 3743
Email: CrouchS@rpsgroup.com
www: www.rpsgroup.com

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RPS Group Plc, company number: 208 7786 (England). Registered office: 20 Western Avenue Milton Park Abingdon Oxfordshire OX14 4SH.

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